Test Equipment - Environmental, HVAC & Pressure

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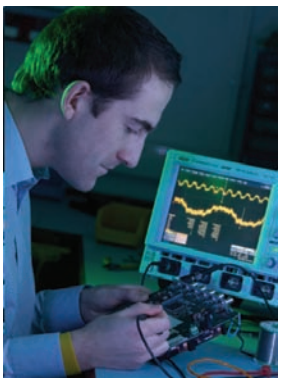
Calibration

Calibration Services



We offer two levels of calibration on most products:

NAMAS Calibration
In addition to Standard Calibration, UKAS provides you with:
Instruments calibrated to UKAS approved procedures
NAMAS labels
NAMAS calibration certificate
UKAS approved calibration equipment
UKAS approved, temperature-controlled testing equipment

Standard Calibration
Instruments calibrated to manufacturers' specification, complete with:
Calibration labels
Integrity seals
Calibration certificate
All calibration results recorded and stored for five years
Re-calibration advice
Suitability for **ISO9000**

Calibration to UKAS - UK Accreditation of Measurement and Sampling, part of UKAS - (United Kingdom Accreditation Service) offers the highest industry standard of integrity available. The service is accepted by all UK approval agencies and is also recognised in many other countries.
The calibration of your equipment is essential wherever you must ensure accuracy of measurement. To arrange for re-calibration of your equipment contact our Value Added Services on 0870 1200 206.

Delivery
We will give you a precise delivery date at the time of your enquiry

How to Order
Products highlighted with the C1 symbol should be ordered by their normal order code, followed by the standard of calibration required. Calibration is charged at the stated rate. For all other items displaying the calibration logo, contact Value Added Services and we will supply you with a full quotation

231084

Anemometers

Handheld Anemometer / Thermometer

13/430/0

- Accurate measurement of windspeed and ambient temperature
- Windspeed measurement in m/s, ft/min, km/h, mph, knots and Beaufort scale bargraph
- Windchill display
- NTC Thermometer with temperature display in °C or °F
- Backlit LCD display
- Auto power off
- Supplied with battery and neckband

Anemometer		Thermometer	
Range	0 to 30 m/s	Range	-10°C to +45°C
Resolution	0.1 m/s	Resolution	0.2°C
Accuracy	± 5%	Accuracy	± 2°C
		Battery	3V (included)

446666.434967

Order Code	Price Each 1+	10+
127-1858		

	Price Each
Standard Calibration Charge	S C21

Pocket Anemometer

The pocket sized meter has a lightweight low-friction ball vane providing high accuracy at high and low air velocity. The robust case incorporates a large easy to read display and wrist strap.
Requires 1 x PP3 battery

- Selectable m/s, fpm, mph, km/hr or knots
- Easy to use push button operation
- Data hold freezes current measured value
- Min/Max memory since power on
- Supplied with instructions for use

Range	Resolution
0.4 to 30 m/s	0.1
80 to 5910 ft/min	1
1.4 to 108 km/hr	0.1
0.9 to 67 mph	0.1
0.8 to 58 knots	0.1
Accuracy	Below 20m/s ±3%FS, above 20m/s ±4%

333717.275784

Order Code	Price Each 1+
462-5869	

Handheld Anemometers

EA3000 and EA3010

These handheld anemometers are ideal for the outdoor professional, being water resistant and having a backlight makes them ideal for all weather conditions.

EA3000 features
- Wind speed measurement in mph, Km/h, m/s or Knots
- LCD backlight
- Auto power off
- Neck band included
- Water resistant

EA3010 extra features
- Beaufort wind graph display
- Wind chill display
- Max wind speed memory
- Temperature display in degrees Celsius or Fahrenheit

381131.344352

Mftrs. List No.	Order Code	Price Each 1+
EA3000	838-8733	
EA3010	838-8741	

Vane Anemometer

72-6638

A small, low cost meter that can accurately measure air velocity and wind speed in air conditioning and heating systems.

- 3½ digit LCD
- Accurate ±(3% + 2 digit) air velocity measurement
- Measurement in ft/min, m/sec, knots and km/hr
- Low-friction ball bearing wheel
- Includes owner manual
- Requires 9V battery (not included)
- **CE** marked

H=76.2, W=38.1, L=110

		Resolution			Resolution
m/sec	0.8 to 30.0m/sec	0.1m/sec	knots	1.6 to 58 knots	0.1 knots
Km/hr	2.8 to 108 km/h	0.1km/hr	ft/min	160 to 5900 ft/min	10 ft/min

Anemometers - continued

Vane Anemometer - continued

72-6638 - continued

228156

Mftrs. List No.	Order Code	Price Each 1+	5+
72-6638	**356-2669**		

Pocket Anemometers

410-1 & 410-2

Available in two models:
410-1 wind or air flow and temperature
410-2 wind or air flow, temperature and **humidity**

- Integrated 40mm vane
- Timed mean value calculation
- Hold function and min./max. values
- Windchill calculation for outdoor areas
- Backlit display
- Auto-off

Both models supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

	Flow Velocity	Temperature	Humidity (410-2 only)
Measuring Range	0.4 to 20 m/s	-10 to 50°C	0 to 100 %rh
Resolution	0.1 m/s	0.1°C	0.1 %rh
Accuracy	± 0.2 m/s + 2% of m.v.	± 0.5 °C	± 2.5 %rh (5 to 95 %rh)
Units	m/s, km/h, fpm, mph, knots, perceived temp. °C/°F (windchill), Beaufort	°C/°F	%rh, wet bulb, dewpoint
Operating Temperature	-10 to 50°C		
Battery Type	Alkaline (2 x AAA)		
Battery Life	100hrs (410-1), 60hrs (410-2) (average, without display illumination)		
Dimensions	133 x 46 x 25mm (Incl. Protective Cap)		

488462.503098

Mftrs. List No.	Order Code	Price Each 1+
410-1	**147-1402**	
410-2	**147-1403**	

Flexible Thermo-Anemometer

- Measures air velocity in m/s, ft/min, km/h, knots & mph
- °C/°F temperature
- Impact-resistant ABS case
- Flexible gooseneck probe adjusts easily to the shape required then remains rigid to allow easy one-hand operation
- Large 25mm backlit 4 digit LCD display with function indicators
- Simultaneous display of airflow and temperature
- Data hold & max/min hold functions
- Auto off and low battery indicator
- Supplied with carry case & battery

Anemometer

	m/s	ft/min	mph	km/h	knots
Min	0.6	119	1.4	2.2	1.2
Max	30	5900	67	108	58
Resolution	0.01	1	0.1	0.1	0.1
Accuracy	±3%	±3%	±3%	±3%	±3%

Thermometer

Range	-10°C to +60°C
Resolution	0.1°C
Accuracy	±1.5°C

Physical

Battery	1x 9V PP3
Dimensions (WxHxD)	45 x 163 x 34mm
Weight	247g

A vane thermo-anemometer with a 0.4m flexible gooseneck sensor which measures air velocity and temperature. This easy-to-use velocity thermo-anemometer allows easy access to areas that are hard to reach. Excellent for ventilation surveys, air conditioning, heating and environmental monitoring.

480540.466706

Order Code	Price Each 1+
142-6152	

FREE GLOBAL LEGISLATION SUPPORT
RoHS, REACH, WEEE, ErP, Batteries Directive - latest updates, free white papers and live online Q&A at **element14.com/legislation**

Vane Thermo-Anemometer

W=76 H=162 D=39mm.
Weight 413g

A remote vane thermo-anemometer measures air velocity and temperature. Excellent for ventilation surveys, air conditioning, heating and environmental monitoring.

CALIBRATION SERVICES

- Measures air velocity in m/s, ft/min, km/h, knots
- °C/°F (switchable) temperature via K-type sensor in the centre of the vane
- Impact-resistant ABS case with remote vane
- Remote 48mm ∅ vane on permanently connected 1.7m coiled cable
- 43mm LCD display with large digits and function indicators
- Data hold & max/min functions (no min for air velocity)
- Auto off and low battery indicator
- Standard ¼" camera bush for tripod mounting
- Can be used free standing with the desk-stand or on a tripod
- Suitable for single-handed operation using the vane mounting clip attached to the instrument
- Supplied with rubber boot, carry case, shoulder strap & 9V battery

Measurement	Range	Resolution	Accuracy
Air Velocity (m/s)	0.3 - 45m/s	0.1m/s	±3%
Air Velocity (ft/min)	60 - 8800ft/min	10ft/min	±3%
Air Velocity (km/h)	1 - 140km/h	0.1km/h	±3%
Air Velocity (knots)	0.6 - 88knots	0.1knots	±3%
Temperature (°C)	0 - 60°C		±2°C
Temperature (°F)	32 - 140°F		±3°F

450393.460951

Mftrs. List No.	Order Code	Price Each 1+
AVM-618B	**129-7749**	

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Anemometer with Remote Probe

TMA10A

AMPROBE

The TMA10A is ideal for HVAC/R technicians measuring Heat / Ventilation / Air Conditioning / Refrigeration wind flow and temperature in residential, commercial and industrial air conditioning systems. It offers numerous functions - use it to check air velocity FPM (Feet Per Minute), air volume (flow) CFM (Cubic Feet per Minute) plus remote vane allows greater measurement flexibility. Switch between °C and °F, Input area of flow measurement to gain accurate air velocity results. Measure an air flow source for a continuous moving average for up to two hours. Determine minimum, maximum and average readings from a single point air source.

- Measuring Air velocity
- Direct measuring of air flow
- Continuous Moving Average for up to 2 hours
- MIN/MAX/AVG reading on a single point
- Air Velocity average for multiple points
- Non Sleep Mode (bypass auto power off)
- Data hold to freeze measurement display of both readings
- RS232 interface output with optional software and cable
- Obtain air flow (CFM) average for multi-point

489620.502903

Mftrs. List No.	Order Code	Price Each 1+
TMA10A	**146-6472**	

		Price Each
Standard Calibration Charge	S C21	

Large-Area Vane Anemometer

417

Features a fixed flow-temperature vane to measure flow, volume flow and temperature. Volume flow is shown directly on the clear backlit display. Just input the duct measurements, and accurate volume flow calculations are automatically displayed. You can also switch between flow and temperature. Flow direction, either from pressure or vacuum source, is visible in the display.

- Direction recognition of flow
- Temperature, flow and volume flow measurement
- Multi-point or timed mean calculation
- Max/min values
- Hold button to freeze readings
- Display light
- Auto-Off function
- 2 years warranty

Probe Type	NTC	Vane	Volume Flow
Measurement range	0°C to +50°C	0.3 to 20 m/s	0 to 99999 m^3/h
Resolution	0.1°C	0.01 m/s	0.1 m^3/h (0 to 99.9 m^3/h)
			1 m^3/h (100 to 99999 m^3/h)
Accuracy	± 0.5°C± 1 digit ± (0.1m/s+1.5% of mv)± 1 digit		
Operating Temperature	0 to 50°C		
Battery	9V		
Battery life	50 hours		

418057

Description	Order Code	Price Each 1+
Vane Anemometer	**108-2990**	
Instrument and Probe Case	**108-3011**	

Compact Vane Anemometer

416

An easy to use anemometer with an attached 16mm vane probe on a telescopic handle (maximum length 890 mm). Just enter the duct measurements directly into the testo 416 and the volume flow measurement is shown on the clear display. You can switch between flow and temperature readings easily. Timed and multi-point mean flow calculations allow easy flow analysis, volume accumulation estimates, and temperature variation monitoring.

- Direct display of volume flow
- Multi-point or timed mean calculation
- Max/min values
- Hold button to freeze readings
- Display light
- Auto-Off function
- Optional TopSafe protects instrument from dirt and impact
- 2 years warranty

Probe Type	Vane
Measurement range	0.6 to 40 m/s
Resolution	0.1 m/s
Accuracy	± (0.2m/s + 1.5% of mv) ± 1 digit
Operating Temperature	-20 to 50°C
Battery	9V Alkali Manganese
Battery life	80 hours

418051

Description	Order Code	Price Each 1+
Vane Anemometer	**108-2988**	
Instrument and Probe Case	**108-3011**	
TopSafe - Protective Carry Case	**108-2989**	

Compact Thermal Anemometer

425

An easy to use, compact anemometer with an attached thermal probe on a telescopic handle (max. 820mm). Duct measurements are easily entered and the volume flow measurement is calculated and shown on the clear display. In addition, it is possible to switch easily between flow and temperature readings.

- Temperature, flow and volume flow measurement
- Multi-point or timed mean calculation
- Max/min values
- Hold button to freeze readings
- Display light
- Auto-Off function
- 2 years warranty

Probe Type	NTC	Thermal Anemometer
Measurement range	-20°C to +70°C	0 to 20 m/s
Resolution	0.1°C	0.01 m/s
Accuracy	± 0.5°C± 1 digit	± (0.03m/s+5% of mv)± 1 digit
Operating Temperature	-20 to 50°C	
Battery	9V	
Battery life	20 hours	

418065

Description	Order Code	Price Each 1+
Thermal Anemometer	**108-2992**	
Instrument and Probe Case	**108-3011**	
TopSafe - Protective Carry Case	**108-2989**	

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Thermo-Anemometer

975 AirMeter™

W=114 x H=287 x D=51mm. Weight 544g

Combining five tools in one, the Fluke 975 provides instant answers on temperature, humidity, air velocity, CO_2, and CO and enables users to quickly generate detailed reports for further analysis.

- Rugged and easy to use
- Instantly calculates dewpoint and wet bulb temperatures, % of outside air, and air flow
- Single point (99 records) or continuous data logging (25,000 records) functionality
- Meter has a keypad lockout feature and it accepts a Kensington lock
- Powerful FlukeView Forms software makes reporting and analysis simple and fast.

Fluke 975 AirMeter includes:
Meter, 3x AA alkaline batteries, user manual, calibration cap, hard carrying case, FlukeView forms software, AC power adapter and international power plugs.
Fluke 975V AirMeter additionally includes: 1x 975VP Air Velocity Probe.

Feature	Range	Accuracy
Temperature	-20°C to 50°C	±0.5°C
Relative Humidity	10% to 90%	±2%
Air Velocity	0.25 to 15 m/s	±4%
CO_2	0 to 5000 ppm	2.75% + 75 ppm
CO	0 to 500 ppm	±5% or ±3 ppm whichever is greater
Dew Point Temperature	-44°C to 50°C	±1°C
Wet Bulb Temperature	-16°C to 50°C	±1.2°C
Volume Flow Rate	0 to 3965 $m^{3/min}$	1x PP3 battery (supplied)

447122.460943

Description	Mfrs. List No.	Order Code	Price Each 1+
Thermo-Anemometer	975	**127-2835**	
AirMeter with Velocity Probe	975V	**127-2836**	
Air Velocity Probe	975VP	**127-2837**	

Airflow Meter

Fluke 922

A simple solution for diagnosing ventilation issues. The Fluke 922 makes airflow measurements easy by combining three tools: differential pressure, airflow, and velocity into a single, rugged meter.

- Measure pressure drops across key HVAC equipment to drive peak performance and extend equipment life
- Match ventilation to occupant loads
- Monitor indoor vs. outdoor pressure relationships and manage the building envelope
- Promote indoor comfort and quality
- Perform duct traversals for accurate airflow readings
- Powerful meter provides differential and static pressure, air velocity and flow readings
- Convenient coloured hoses help proper interpretation of pressure readings
- Easy to use without sacrificing performance
- Bright, backlit display for clear viewing in all environments
- User-defined duct shape and size for maximum airflow accuracy
- Resolution down to 0.001 in H_2O
- 99 point data storage capacity
- Min/Max/Average/Hold functions for easy data analysis
- Auto power off saves battery life

Feature	Range	Accuracy
Air Pressure	4000 Pa	±(1%+1Pa)
	16 in H_2O	±(1%+0.01 in H_2O)
	400mm H_2O	±(1%+0.1mm H_2O)
	40mbar	±(1%+0.01mbar)
	0.6 PSI	±(1%+0.0001PSI)
Air Velocity	250 to 16000fpm	±2.5% of rdg
	1 to 80 m/s	±2.5% of rdg
Air Flow (Volume)	0 to 99,999 cfm	
	0 to 99,999 m^3/hr	
	0 to 99,999 l/s	
Temperature	0°C to 50°C	±(2% + 2°C)
Dimensions	W=78 x H=175 x D=42mm. Weight 640g	

Anemometers - continued

Airflow Meter - continued

Fluke 922 - continued

Fluke 922 includes:
Meter, 2x Rubber Hoses, 4x AA Batteries, Users Manual Soft Carrying Case
Fluke 922 Kit additionally includes:
12" pitot tubes, TPak Magnetic Strip, TPak Strap, TPak Latch Tab, Hard Carrying Case.

469774.469766

Description	Mftrs. List No.	Order Code	Price Each 1+
Thermo-Anemometer	922	**132-7237**	
T-A with velocity probe	922/KIT	**132-7238**	
Air Velocity Probe	PT12	**132-7241**	

Particle Counter

FLUKE

Fluke 985

NEW

The Fluke 985 Particle Counter is the a choice for HVAC and IAQ professionals. From filter testing to IAQ investigations, the counter is the portable solution for determining airborne particle concentrations. Use the counter to immediately respond to occupant complaints, or as part of a comprehensive preventive maintenance program. With a large screen, intuitive icons for navigation and on-screen data presentation, the counter allows users to run more tests quickly, with less time spent cycling through screens to obtain the data.

- Measure filter efficiency
- Monitor industrial cleanrooms
- Pre-screen indoor air quality and confidently work with IAQ specialists
- Locate particle sources for remediation
- Report the effectiveness of repairs to customers
- Drive additional business by demonstrating the need for maintenance and repair
- Six channels and particle size range of 0.3 - 10.0 μm:
- 3.5" QVGC Color display
- USB/Ethernet charge cradle

Kit Contents: Counter unit, Charging/communication cradle, Ethernet cable, USB cable, power supply, Zero count inlet-filter, filter adapter, sample inlet protective cap, Hard case, Basic manual and User manual CD.

Channels	0.3µm, 0.5µm, 1µm, 2µm, 5µm, 10µm
Flow rate	0.1 cfm (2.83 L/min)
Light source	775 nm to 795 nm, 90mW class 3B laser
Count modes	Raw counts, #/m3, #/ft3, #/liter in Cumulative or Differential mode
Data storage	10,000 records (rotating buffer)
Alarms	Counts, low battery, sensor fail
Delay time	0 to 24 hours
Sample inlet	Isokinetic probe
Communication mode	USB or Etheret
Dimensions (LxWxD)	272x99x53
Weight	680g
Operating temperature	10°C to 40°C

658494

Mftrs. List No.	Order Code	Price Each 1+
FLUKE-985	**211-4832**	

Hazardous Gas & Liquid Testers

Carbon Monoxide

Carbon Monoxide is difficult to detect, as it is a colourless, odorless, tastless and toxic gas produced as a by-product of combustion. Because you can't see, taste or smell it, carbon monoxide can kill you before you know it is there. Fire professionals are increasingly called upon to respond to calls regarding possible carbon monoxide poisonings. Any fuel burning appliance, vehicle, tool or other device has the potential to produce dangerous levels of carbon monoxide gas. Examples of carbon monoxide producing devices commonly in use in or around you home include:
Fuel fired furnaces (non electric)
Gas water heaters
Fireplaces and wood stoves
Gas stoves and Gas dryers

222548

Carbon Monoxide Levels	
0 ppm	Desirable level
100 ppm	Slight headache 2 to 3 hours
400 ppm	Frontal headache 1 to 2 hours, widespread in 2.5 to 3.5 hours
800 ppm	Dizzines, Nausea, convulsions within 45 minutes
1600 ppm	Headache, dizziness, nausea within 20 minutes, death within 1-2 hours
3200 ppm	Headache, dizziness, nausea within 5 to 10 minutes, death within 1 hour
6400 ppm	Headache, dizziness, nausea within 1 to 2 minutes, death within 25 to 30 minutes

Combustible Gas Leak Detector

- Long 400mm gooseneck for hard-to-reach places
- Simple adustable 'tick-rate' increases as the sensor tip aproaches a leak
- Detects Methane, natural gas, butane and propane

W=72 H=221 D=46mm. Weight 520g

Solid State, Low Power Semiconductor Sensor

Sensor sensitivity:	50 ppm (methane)
Response time:	< 2 second

Gasses Sensed (Partial List)
Methane, Natural Gas, Ammonia, Hydrogen Sulphide, Propane, Acetone, Petrol, Naphtha, Smoke, Steam, Lacquer Thinners, Jet Fuel, Butane, Industrial Solvents, Alcohol

Alarm
Visible & audible alarm at 10% LEL for Methane. Can be calibrated for other concentrations or gasses.

Physical

Battery Type	3 x C (supplied)
Battery life	8 hours continuous use
Flexible gooseneck	400mm/16" reach

446885.430827

Order Code	Price Each 1+
127-0536	

Combustible Gas Leak Detector

KANE

- Simple adjustable 'tick rate' increases as the sensor tip approaches a leak
- Detects Methane, natural gas, butane and propane
- Long 400mm gooseneck for hard to reach places
- 'Tip-light' illuminates the area of the leak
- Sensor provides accurate detection
- Rubber boot protects instrument

Solid State, low power semiconductor sensor	Sensor sensitivity: 50 ppm (Methane) Typical sensor life: 3 years Reaction time: < 1 second
Gases sensed (Partial list)	Methane, Natural Gas, Ammonia, Hydrogen, Propane, Acetone, Petrol, Refrigerants, Ethylene, Halon, Laquer, Thinners, Industrial Solvents, Alcohol, Jet fuel
Red LED	Flashes to indicate gas presence. ON continuously indicates low battery
Audible indicator	From internal speaker, increased 'tick-rate' with gas presence. Optional ear-piece for noisy environments
Green LED indicator	Indicates power on
Battery type	1 x 9 volt battery (PP9)
Battery life	>5h> continuous
Flexible gooseneck	400mm/18" reach Bright LED incorporated in sensor head
Dimensions	100mm x 205mm x 36mm 4" x 8"1.5"
Weight	460g/15oz

220427

Mftrs. List No.	Order Code	Price Each 1+
CD100AA	**325-6145**	

Radiation Meters

Radiation Survey Meter

FLUKE

Fluke 481

NEW

Easy-to-use, handheld device helps to protect operations and reassure employees. The Fluke-481 Radiation Survey Meter is a portable and practical means for identifying irradiated goods, and for helping to remediate contamination and safety issues while minimally impacting operations. Use of the device reassures employees that radiation risks are known, monitored and measured for their protection. If radiation is found, a clear and quantifiable result allows managers to comply with federal guidelines, without overreacting with unnecessary steps that might halt operations, impact productivity or lead to lost revenue.

- High sensitivity measurement of rate and dose simultaneously, with the capability to record peak rate
- Available with dose equivalent energy response (SI units)
- Easy touch keys
- Screen - Bright, highly visible colors
- Auto-ranging and auto-zeroing
- RS-232 communications interface with optional Windows-based Excel add-in for data logging

- Ergonomic, anti-fatigue handle with replaceable grip, wrist strap and tripod mount
- Programmable flashing LCD display and audible alarm
- Easily-accessible battery door (operated by 2 9-volt alkaline batteries) on the outside of the bottom case

Applications: Ideal for detecting irradiated goods, equipment, surfaces or environments in industrial settings, for ensuring worker safety and complying with federal regulations.

- Food processing or packaging screening
- Transportation goods screening
- Ports
- First Responders (Police/Fire)

Radiation detected	Beta > 100 keV Gamma > 7 keV
Operating ranges	0 mR/h to 5 mR/h (8 sec) 0 mR/h to 50 mR/h (2.5 sec) 0 mR/h to 500 mR/h (2 sec) 0 R/h to 5 R/h (2 sec) 0 R/h to 50 R/h (2 sec)
Accuracy	Within 10 % of readings between 10 % and 100 % of full scale indication on any range, exclusive of energy response
Detector	Chamber (cc volume air ionization) 349 cc Chamber wall (phenolic) 246 mg/cm^2 Chamber window (mylar) 6.6 mg/cm^2 Beta slide 440 mg/cm^2
Automatic features	Auto-zeroing, auto-ranging, and auto-backlight
Power requirements	Two 9 V alkaline, 200 hours operation
Warm-up time	One minute
Battery life	Four+ hours continuous use per battery pack (assumes 50 % brightness of LCD)
Dimensions (W x D x H)	100 x 200 x 150 mm
Weight	1.11 kg

635082

Description	Order Code	Price Each 1+
Fluke 481 Ion Chamber Survey Meter	**189-9066**	
Fluke 481-DESI Ion Chamber Survey Meter, dose equivalent SI	**189-9067**	
Accessories		
Carry Case	**189-9068**	

Heating & Refrigeration

Combustion Meter

KANE 250

The KANE 250 is the lowest priced combustion analyser that does not compromise on performance or features. Its unique rotary switch also makes it the simplest and quickest to use.
The KANE 250 is also available as a kit, consisting of infra red printer, charger/mains adapter and carry case.

- O_2, CO, CO_2, CO/CO_2 ratio and efficiency readings
- Multi fuel
- Professional quality sensors (CO readings to 1ppm)
- Detachable flue probe
- Real time clock
- Infra-red output to optional printer
- Rubber sleeve with integral magnet
- Designed to meet BS7927

L=200, W=90, D=45mm

	Range	Resolution	Accuracy
Temperature Measurement			
Flue Temperature	0 - 600°C	1°C	±2°C±0.3% of reading
Inlet Temperature (Internal Sensor)	0 - 100°C	1°C	±1°C±0.3% of reading
Temp (Nett)	0 - 600°C	1°C	±2°C±0.3% of reading
Gas Measurement			
Oxygen	0 - 21%	0.1%	±0.2%
Carbon Monoxide	0 - 1000ppm 4000ppm max for 15 mins	1ppm	±10ppm<100ppm ±5% of rdg
Carbon Dioxide	0 - 30%	0.1%	±0.3% reading
Efficiency	0 - 99.9%	0.1%	±1% reading
Excess Air	0 - 250%	0.1%	±0.2%
CO/CO_2 ratio	0 - 0.9999	0.0001	±5% reading
General			
Pre Programmed Fuels	Natural gas, light oil (28/35 sec), propane, butane, LPG		
Battery life	4x AA type, approx 12 hours		
Weight	1kg		

339526.409900

Description	Mftrs. List No.	Order Code	Price Each 1+	2+	5+
Combustion Analyser	KANE250	**505-7670**			
Combustion Analyser Kit	KANE250 KIT	**505-7681**			

Gas Analyser

KANE 425

L=200, W=90, D=45mm

Designed to meet EN50379, BS7927, BS7967 and IGE/11/UP/1B the latest British and European standards for flue gas analysers. A simple rotary switch enables the engineer to quickly measure combustion performance, differential pressure, differential temperature and to perform timed let-by/tightness tests and room CO build-up tests. On screen prompts guide the user where necessary. Thanks to the high accuracy and stability of its pressure readings, difficult tasks such as measuring flue draught or setting the differential pressure of air/fuel ratio valves can be performed with confidence.

- Four line backlit display controlled by rotary switch
- Protective rubber sleeve with magnet for "hands free" use
- Multi-fuel: Natural Gas, Propane, Butane, LPG, Light Oils (28/35 sec)
- O2, CO, CO2, CO/CO2 ratio, temperature and efficiency readings
- High accuracy differential manometer
- Differential thermometer
- "Send" button for instant printout and logging
- Separate reports for: Combustion, Pressure, Let-by and Tightness, Temperature, CO build up
- Battery life typically 12+ hours
- Designed to meet BS7927, BS7967 and EN50379
- Torch light

	Range	Resolution	Accuracy
Temperature Measurement			
Flue Temperature	0 - 600°C	0.1°C	±2°C±0.3% of reading
Inlet Temperature (Internal Sensor)	0 - 50°C	0.1°C	±1°C±0.3% of reading
Inlet Temperature (External Sensor)	0 - 600°C	0.1°C	±2°C±0.3% of reading
Gas Measurement			
Oxygen	0 - 21%	0.1%	±0.2%
Carbon Monoxide	0 - 2000ppm (nom.) 4000ppm max for 15 mins	1ppm	±10ppm<100ppm ±5% of rdg
Carbon Dioxide	0 - 30%	0.1%	±0.3% reading
Efficiency	0 - 99.9%	0.1%	±1% reading
Excess Air	0 - 250%	0.1%	±0.2%
CO/CO_2 ratio	0 - 0.9999	0.0001	±5% reading
Pressure (Differential)			
Nominal Range ±80mBar	±0.2 mBar	0.001 mBar	±0.005 mBar
Maximum over-range without damage to sensor is ±400mBar	±1 mBar ±80 mBar	0.001 mBar 0.01 mBar	±0.03 mBar ±3% of reading

Storage Capacity
99 Combustion Tests, 20 Pressure Tests, 20 Let-by / Tightness Tests, 20 Temperature Tests, 20 Room CO Tests

General

Pre Programmed Fuels	Natural gas, Propane, Butane, LPG, Light Oils (28/35 sec)
Ambient Operating Range	0°C to +40°C. 10% to 90% RH non-condensing.
Battery life	4x AA type, >12 hours (alkaline)
Dimensions	Handset: 200x45x90mm. Probe: L=300mm ∅6mm. Hose: 3m
Weight	0.8kg (handset with boot)

Each KANE425 is supplied with:
Flue probe, protective rubber sleeve with integral magnet, 2 pressure connectors, 4 x AA alkaline batteries and instruction manual.
The KANE425KIT additionally includes:
Soft protective carry case, infra-red printer, plug-in gas leak detection probe, temperature probe, NiMH rechargeable batteries and 220V mains charger.

491377

Description	Mftrs. List No.	Order Code	Price Each 1+
Gas Analyser	425	**134-7870**	
Gas Analyser Kit	425 KIT	**134-7873**	
Gas Leak Detection Probe	GLD450	**134-7874**	
NiMH Rechargeable Batteries	B15	**134-7877**	
Soft Carry Case	17820	**134-7878**	

Refrigerant Leak Detector

RLD10

The RLD10 makes pinpointing leaks as easy as one, two. Detect leaking refrigerant using the high sensitivity mode then switch to the low sensitivity mode to pinpoint its source. If background noise makes the audible tic hard to hear, you can count on the colour scaled LED indicators.

- Auto zeros when turned on
- LED panel indicates refrigerant leak concentration
- Two position sensitivity selector
- Audible tick rate
- Long gooseneck probe
- One-hand operation
- Automatically detects all existing refrigerants and blends

Sensor	Advanced ionisation detection	Duty cycle	Continuous
Sensitivity	0.5 oz per year R134A	Battery life	Approximately eight hours
Indicators	Audible: Variable tick Visual: Scaled LED array	Probe length	18-1/2"
		Ambient operating conditions	0-40°C, 0 to 80% RH
Warm-up	<10 seconds	Power supply	One 9V battery
Response time	<1 second		

339530

Mftrs. List No.	Order Code	Price Each 1+
RLD10	**505-7772**	

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Heating & Refrigeration - continued

Ultrasonic Leak Detector Kit

AMPROBE

Set of ULD-300 with UT-300 Transmitter

- Includes transmitter
- Transmitter [inch]pressurizes" area with ultrasonic sound enabling the ULD 300 to pinpoint leaks (used in areas where gas is not sufficiently pressurized)
- Applications include air tightness of cars or houses

525681

Mftrs. List No.	Order Code	Price Each 1+
TMULD-300	**167-1208**	

Hygrometers

Thermo-Hygrometer

- Compact digital Hygro-Thermometer
- Fast response time
- High performance
- Max hold and data hold function
- Dual display and backlight

	Range	Accuracy
Humidity	0 to 100% RH	±3.5% RH
Temperature	-20 to 60°C	±2°C

W=45 H=255 D=34mm. Weight 200g

624208

Description	Mftrs. List No.	Order Code	Price Each 1+
Thermo-Hygrometer	ST-321	**100-3032**	

		Price Each
Standard Calibration Charge	S C12	
UKAS Calibration Charge	N C12	

Relative Humidity and Temperature Meter

AMPROBE

TH-3

The TH-3 uses a precision capacitance sensor to deliver accurate performance with long term stability. This high accuracy instrument measures the full range of relative humidity from 0% to 100% and features an exceptionally wide ambient temperature measurement range from -20°C (-4°F) to 60°C (140°F). The sensor is mounted on a long shaft extending from the top surface of the unit, making probing of ductwork and hard to reach areas more easy. The large LCD displays two measurements simultaneously with a full range of display options including Hold, Min, Max, and Relative. The TH-3 is a complete package and comes with soft carry case, sensor cover, battery and manual.

- Auto power off
- Soft carrying case
- User manual includes Wet Bulb chart
- Laboratory grade
- Dual display of Relative Humidity and Temperature simultaneously
- Relative function monitors humidity and temperature changes
- Extended probe stem to easily access air ducts
- Min/Max readings Data hold to freeze measurement value on display
- Capacitive sensor with protective cover

489623.502902

Mftrs. List No.	Order Code	Price Each 1+
TH-3	**146-6476**	

Pocket Hygrometer

610

testo

- Long-term drift-free Testo humidity sensor
- 2.5 %rh accuracy with calibration protocol
- Including dewpoint calculation and wet bulb
- Hold function and max./min. values
- Backlit display
- Auto-off

Supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

Temperature		Accuracy	± 2.5 %rh (5 to 95 %rh)
Measuring Range	-10°C to 50°C	Units	%rh, wet bulb, dewpoint
Resolution	0.1°C	**General Specifications**	
Accuracy	± 0.5°C	Battery Type	Alkaline (2 x AAA)
Units	°C/°F	Battery Life	200 hrs (average, without display illumination)
Humidty			
Measuring Range	0 to 100 %rh	Dimensions (Incl. Protective Cap)	119 x 46 x 25mm
Resolution	0.1 %rh		

488389.503095

Mftrs. List No.	Order Code	Price Each 1+
610	**147-1397**	

Handheld Thermo-Hygrometer

- Dual display of humidity and temperature
- Measures temperature in °C or °F
- Impact-resistant ABS case with rubber boot and flip-out desk stand
- Probe with 1.8m coiled cable
- 45mm high intensity backlit LCD with dual display and status indicators
- Sampling rate 2.5 times per second
- Data hold and max/min hold functions
- Auto power off
- Mounting clip on the instrument allows single-handed use
- Supplied with carry bag & strap, rubber boot and battery

Thermometer		Resolution	0.1°C
Range	-30°C to +100°C	Accuracy	±1°C
Resolution	0.1°C	**Wet Bulb**	
Accuracy	±0.5°C	Range	0°C to 80°C
Humidity Meter		Resolution	0.1°C
Range	0 to 100% RH	Accuracy	±1°C
Resolution	0.1% RH	**Physical**	
Accuracy	±2% RH	Battery	PP3 (included)
Dew Point		Dimensions (WxH)	72 x 155 x 35mm
Range	-30°C to +100°C	Weight	210g

480495.466703

Order Code	Price Each 1+
142-6148	

Relative Humidity Meter

HANNA instruments

- Portable relative humidity and temperature meter
- Large LCD
- Detachable 1m probe
- Fast response, high accuracy
- Measurement in °C or °F, selectable
- Supplied complete with probe and battery

Range	10% to 95% RH 0°C to +60°C°C (32 to 140°F)
Resolution	0.1% RH 0.1°C, 1°F
Accuracy	2% RH,0.4°C, 1°F
Weight	315g
Battery	1 x 9V PP3 (supplied)
Battery life	100 hrs

222472

Order Code	Price Each 1+
710-6208	

RoHS Compliant Non-compliant

Temperature Humidity Meter

971

Invaluable for facility maintenance and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). Lightweight and easy to hold, with a rugged holster and twist-open protective sensor cover.

- Simultaneously measures humidity and temperature
- Measures dew point and wet bulb
- 99 record storage capacity
- Min/Max/Avg Data Hold
- Ergonomic design with built-in belt clip and protective holster
- Backlit, dual readings display
- Twist-open protective cap
- Low battery indicator

Temperature Measurements

Range	-20°C to +60°C
Resolution	0.1°C
Accuracy	±0.5°C (0°C-45°C) / ±1.0°C (rest of range)
Response Time	500 ms
Sensor Type	NTC

Humidity Measurements

Range	5% to 95% R.H.
Accuracy	±2.5% R.H. (10%-90% R.H.) / ±5% (rest of range)
Response Time	60 s with 1 m/s air movement
Sensor Type	Electronic Capacitance Polymer Film Sensor

W=60 H=194 D=34mm. Weight 188g

624212

Mftrs. List No.	Order Code	Price Each 1+
971	**114-7977**	

		Price Each
Standard Calibration Charge	S C13	
UKAS Calibration Charge	N C13	

Temperature and Humidity Instrument

625

An ideal entry level instrument for measurements of temperature, humidity and dewpoint. Use it to monitor hard-to reach points in AC and heating system ducts, environmental changes in remote rooms or storage areas, anywhere you need to be two places at the same time or only have one hand free to work. The clear back-lit display can be switched between relative humidity, wet bulb, and dewpoint at the touch of a button. The temperature / humidity probe can be used 2 ways: either attached to the instrument or connected via a probe handle and cable (108-3014).

Probe	Range	Accuracy (±1 digit)	Resolution
NTC Temperature Probe	-10°C to +60°C	±0.5°C	0.1°C
Capacitive Humidity Sensor	0 to 100% RH	±2.5% RH (5 - 95% RH)	0.1% RH

Includes: humidity/temperature measuring instrument, incl. plug-in humidity probe head, battery and calibration protocol.

W=64 H=182 D=40mm. Weight 195g

418875

Description	Order Code	Price Each 1+
625 Thermo Hygrometer	**108-3012**	
Accessories		
Plug-In Probe Handle	**108-3014**	
Instrument and Probe Case	**108-3011**	
Protective Case	**108-2989**	

HygroPalm Hand-Held Humidity Instrument

HygroPalm 22

- High accuracy humidity/temperature measurement
- Rapid response and highly repeatable
- Dew point and other psychrometric calculations
- 2000 data point memory
- Auto-diagnostics and automatic error correction
- Interchangeable probe option

HygroPalm 22

Measuring range	0...100%rh, -100°C...+200°C (probe dependant)
Operating range	0...100%rh, -10°C...+60°C
Accuracy	±0.8 %rh, ±0.1K at 23±5°C
Resolution	0.02%rh, 0.01°C
Long-term stability	<1%rh/°C per year
Calculation	All psychrometric values
Adjustment	Multi-point %rh, 2 point °C from keypad
PC interface	USB
Display	Graphic, backlit
Power supply	9V battery,
Weight	Approx 210g

**Note: The HP22 is not supplied with a measurement probe, these should be ordered separately

532688

Mftrs. List No.	Description	Order Code	Price Each 1+
HP22	HygroPalm 22	**169-8599**	

HygroClip2 Interchangeable Digital Probes

HC2-S

- Fully interchangeable without loss of precision
- Measurements ranges 0...100%rh, -100...200°C
- Based on AirChip 3000 digital technology
- User configurable
- Integral 2000 point data storage
- Automatic sensor test and drift compensation

HygroClip2 HC2-S

- Humidity and temperature measurement in air
- Easily cable mounted
- Dimensions: 80 x 15mm diameter

HygroClip2 HC2-S

Humidity measuring range	0...100%rh
Temperature limits	-40...100°C
Accuracy at 23°C ±5°C	±0.8%rh, ± 0.1°C
Probe material	Black polycarbonate
Dust filter	Polyethylene

532689

Mftrs. List No.	Description	Order Code	Price Each 1+
HC2-S	Ambient air probe	**169-8600**	
E2-02A	2m probe extension cable	**169-8604**	

Light Meters

Lux Meter

- 3½ digit display
- Low battery indicator
- Hand held digital light meter with integral sensor
- 3 switchable ranges
- Supplied with carry case

0 - 1999 lux	(resolution 1 lux)
0 - 19999 lux	(resolution 10 lux)
19999 - 50,000 lux	(resolution 100 lux)

Requires 9V PP3 battery for operation

224552

Mftrs. List No.	Order Code	Price Each 1+
LX101	**725-109**	

Lux Meter

540

- Sensor is adjusted to the spectral sensitivity of the eye
- Hold reading function
- Max./min. values
- Backlit display
- Auto-off

Measuring Range	0 to 99,999 Lux 1 Lux (0 to 19,999 Lux) 10 Lux (20,000 to 99,999 Lux)
Accuracy	± 3% (Compared to reference)
Units	Lux, Footcandle
Operating Temperature	0 to 50°C
Battery Type	Alkaline (2 x AAA)
Battery Life	20 hrs (average, without display illumination)
Dimensions (Incl. Protective Cap)	133 x 46 x 25mm

Supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

488530.503099

Mftrs. List No.	Order Code	Price Each 1+
540	**147-1404**	

Digital Light Meter

72-6693

W=72, D=32, L=180

An easy to use, versatile, hand-held, microprocessor controlled, digital light meter.

- 3 ranges 2,000/20,000/50,000 LUX
- 3 ranges 200/2,000/10,000 Ft-cd
- Extra large, dual function display with contrast adjustment
- User selectable lighting type (tungsten, fluorescent, daylight and mercury)
- Records max./min./avg. readings
- Data hold and auto power off
- Includes owner manual
- **CE** marked

Range	Resolution	Range	Resolution	Power	9V Battery (not included)
2000 LUX	1 LUX	200 Ft-cd	0.1Ft-cd	Dimensions	W = 55mm, L = 85mm, D= 12mm
20,000 LUX	10 LUX	2,000 Ft-cd	1Ft-cd	(sensor probe)	
100,000 LUX	100 LUX	10,000 Ft-cd	10Ft-cd		

Light Meters - continued

Digital Light Meter - continued

72-6693 - continued

228182

Mftrs.		Price Each
List No.	Order Code	1+
72-6693	**356-2670**	

Light Meter

Easy-to-use light meter with wide measuring range up to 400,000 lux, large LCD display, 41-segment analogue bargraph, relative mode and user-selectable measuring units. Ideal for environmental monitoring, health and safety checks, and industrial applications.

- Measures both Lux and Foot Candles (FC), user selectable
- Manual range selection of 5 ranges (Lux), 4 (FC)
- Impact-resistant ABS case with protective rubber boot
- Silicon photo diode sensor and spectral response filter

W=80 H=170 D=43mm. Weight=390g

- Fully cosine corrected
- Sensor connected to the instrument by a fixed approx 1.5 metre coiled cable
- Measuring rate of 1.5 times per second
- Easy to read - large 43mm backlit LCD display with 41 segment bar graph and function indicators
- Peak hold, Data hold and Max/min hold
- Relative reading
- Over range indication
- Reset function
- Auto power off and low battery indication
- Supplied with carry pouch, rubber boot, protective lens cap & 9V battery

Range	Resolution	Accuracy
40,400,4000,40000,400000 Lux	0.01,0.1,1,10,100 Lux	±(5%+10d) <10kLux, ±(10%+10d) >10kLux,
40, 400, 4000, 40,000 FC	0.01, 0.1, 1, 10 FC	±(5%+10d) <10kLux, ±(10%+10d) >10kLux,

450419.460952

Mftrs.		Price Each
List No.	Order Code	1+
LX-1308	**129-7753**	

Hand-Held Light Meter

Easy-to-use light meter with USB interface, wide measuring range up to 400,000 lux, large LCD display, 40-segment analogue bargraph, relative mode and user-selectable measuring units. Ideal for environmental monitoring, health and safety checks, and industrial applications.

Range	400 / 4000 / 40000 / 400000 Lux 40 / 400 / 4000 / 40000 FC
Resolution	0.1 / 1 / 10 / 100 Lux 0.01 / 0.1 / 1 / 10 FC
Accuracy	±(5% + 10 digits) below 10000 Lux ±(10% + 10 digits) above 10000 Lux
Power	1x 9V PP3
Dimensions (WxHxD)	80 x 170 x 43mm
Weight	390g

- Measures both Lux and Foot Candles (FC), user selectable
- Range selection of 4 ranges (Lux), 4 (FC)
- Impact-resistant ABS case with protective rubber boot
- Silicon photo diode sensor and spectral response filter
- Fully cosine corrected
- Sensor connected to the instrument by a fixed approx 1.5 metre coiled cable
- Measuring rate of 1.5 times per second
- Easy to read - large backlit LCD display with 40 segment bar graph and function indicators
- Peak hold and Data hold freezes measured values
- Max/min hold
- Relative reading
- Over range indication
- Auto zero
- Auto power off and low battery indication
- USB interface for output to PC
- Supplied with carry pouch, rubber boot, USB interface cable, protective lens cap & battery

480545.466707

Description	Order Code	Price Each
		1+
Light Meter	**142-6153**	

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Light Meter Manual Ranging

AMPROBE

- Measure in Lux or Footcandles, front panel switchable
- Measuring Range to 20,0000 Lux or Foot candles
- Silicon photodiode sensor and filter
- Data Hold to freeze reading on the digital display
- MIN / MAX ability to show high and low readings
- Includes protective sensor cap
- Large, 3-1/2 digit display

525724

Mftrs.		Price Each
List No.	Order Code	1+
LM-100	**167-1222**	
		Price Each
Standard Calibration Charge	**S** C 21	

Light Meter Auto Ranging

AMPROBE

- Measure in Lux or Footcandles, front panel switchable
- Measuring Range to 200,000 Lux or 20,000 Foot candles
- Silicon photodiode sensor and filter
- Data Hold to freeze reading on the digital display
- MIN / MAX ability to show high and low readings
- Autoranging plus Manual Range
- Zero function to null display before a reading
- Auto Power Off to save battery life
- Includes protective sensor cap
- Large, 3-1/2 digit display

525725

Mftrs.		Price Each
List No.	Order Code	1+
LM-120	**167-1223**	
		Price Each
Standard Calibration Charge	**S** C 21	

Light Meter

T545

testo

In order to have good light quality the luminous intensity in places of work, hospitals, offices or schools has to fulfil specific minimum values. This can be measured and documented

- Timed mean calculations
- Multi-point mean calculations via 99 measurement points
- Up to 99 locations can be selected
- Logger function (3000 measured valued)
- Hold/Max/Min/Mean
- 2 switchable ranges of resolution
- Supplied with probe, battery and instruction manual

H=50mm, W=68mm, L=220mm

Measurement range	0 to 100,000 Lux	0 to 100,000 Lux 10 Lux	Weight	500g
Resolution	0 to 32,000 Lux 1 Lux			

222568

Mftrs.		Price Each
List No.	Order Code	1+
T545	**311-8447**	

Liquid Testers

pH Tester

HANNA instruments

- Low cost
- Ideal for testing involving test-tubes or limited access
- Large clear LCD
- pH meter 710-7535
- Replacement pH electrode 710-7547

pH: replacement electrode available
0pH to 14pHpH, 0.01 res
Accuracy: ± 0.2pH
Calibration: Manual Single Point

Dimensions: 66 x 50 x 25mm

222471

Description	Order Code	Price Each
		1+
pH tester	**710-7535**	
Replacement electrode	**710-7547**	

RoHS Compliant Non-compliant

Waterproof pocket pH Meters

- Dual level display shows pH and °C
- Battery life indication
- Replaceable pH electrode
- Waterproof and floating case
- Automatic calibration

		HI 98127	HI 98128
pH	Range	0.0 to 14.0	0.00 to 14.00
	Resolution	0.1	0.01
	Accuracy (@20°C)	±0.1	±0.05
Temperature	Range	0.0 to 60.0°C	0.0 to 60.0°C
	Resolution	0.1	0.1
	Accuracy	±0.5°C	±0.5°C
Calibration		Automatic 1 or 2 points with 2 sets of memorised buffers (pH 4.01/7.01/10.1 or pH 4.01/6.86/9.18)	
Temperature compensation		Automatic (user may disengage)	
Environment		From 0 to 50°C; RH 100%	
Battery type/life		4 x 1.5V with BEPS (battery error prevention system)/350 hours	
Auto shut off		After 8 minutes	
LCD		Custom, dual-level	
Casing		Waterproof, 100% buoyancy	
Stability indicator		Illuminates when pH reading is stable	
Dimensions		163x40x26	
Weight		85g	

234810

Mftrs. List No.		Order Code	Price Each 1+
HI-98127	pH meter	**369-5876**	
HI-98128	pH meter	**369-5888**	
HI-73127	pH electrode	**369-5890**	

pH Meter

206

H=197, W=33, D=20mm Weight = 69g

Compact pH measuring instruments for measuring liquids. Automatic recognition of a stable reading makes it easier to measure. The TopSafe case makes the instruments ideal for outdoor applications or use in tough industrial conditions.

- Versatile, accurate pH measuring instrument
- Not affected by dust or dirt thanks to the TopSafe protection case
- Maintenance-free gel electrode
- Built-in temperature probe
- 2 line display
- Automatic full scale value recognition
- pH1 offers a probe head for liquids

Starter Kits also available, consisting of:

- Testo 206 instrument
- Belt / wall holder
- 2 x 250ml buffer solution with dosing chamber (pH4 and pH7)
- High standard aluminium storage case

Parameters	pH / °C	Temperature compensation	Automatic
Sensor	pH electrode / NTC	Display	LCD, 2 line, 0 to 70°C
Measurment channels	2	Probes	Screw-in pH / °C probe modules
Measuring Range	0pH to 14pH	Measurement rate	2 measurements per second
Resolution pH	0.01 pH	Operating temp	0°C to +60°C
Resolution Temperature	0.1°C	Storage temp	-20°C to +70°C
Accuracy pH	±0.02 pH	Battery	1x CR2032
Accuracy Temperature	±0.4 °C	Battery Life	80 hours (auto off 10 min)

377679.381254

Description	Mftrs. List No.	Order Code	Price Each 1+
pH Meter for liquids	206 PH1	**836-9089**	
pH Meter for liquids starter kit	206 PH1 KIT	**836-9097**	

pH/ion/temp Meter

HI-8424

Easy-to-use portable pH/temperature meter with mV range ion selective electrode work and redox measurements. For easy and speed of use the meter benefits from auto or manual temperature compensation and auto calibration with three standard pH buffers recognised.
Self-diagnostic error codes are displayed on the LCD for example, to indicate an incorrect buffer or defective electrode so that problems are quickly and easy corrected by the user. Supplied complete with general-purpose epoxy-bodied pH electrode and temperature probe.

- Hand-held pH/mV°C meter
- Automatic calibration and 3 buffer recognition
- Auto and manual temperature compensation
- Supplied complete with epoxy-bodied pH electrode and temperature and temperature probe
- Self-diagnostic error codes for problem solving

Range	0pH to 14pHpH 0 to ± 399.9mV (ISE),0 to ± 1999mV (ORP) 0.0°C to 100.0°C
Resolution	0.01pH 0.1mV (ISE), 1mV (ORP) 0.1°C
Accuracy	± 0.01pH,± 1mV,± 0.4°C
Calibration	auto with 3 memorised buffers 4.01, 7.01, 10.01
Temperature Compensation	auto or manual from 0°C to 100°C
Battery type/life	9V PP3 (supplied),100 hours
Dimensions	185 X 82 X 45mm
Weight	520g

224542

Mftrs. List No.	Order Code	Price Each 1+
HI-8424	**710-8102**	
Spare pH electrode		
HI-1230B	**327-7033**	

Pocket Conductivity Tester

Primo5

Microprocessor stick meter for conductivity and TDS with push-button, single point auto-calibration and temperature compensation. Battery life is 250 hours with new battery indicator on the LCD display.

- Automatic calibration
- Automatic temperature compensation
- TDS or conductivity models
- Suitable for laboratory, industry, production or field use

W=50mm, D=25mm, L=180mm

	Primo	Primo5
Range	1999 mg/l	1999S/cm
Resolution	1mg/l	1S/cm
Accuracy	1.5% full scale	1S/cm
Calibration	Automatic	auto at 1413 S/cm
Temp compensation	auto from 0 to 60°C with ß = 2%/°C	
Battery life/type	250h, 2 x 1.5V	
Weight	80g	

228161

	Order Code	Price Each 1+
Primo5	**327-7161**	

Liquid Testers - continued

Conductivity, pH and TDS Meter

HI98129 and HI98130

- Dual level display shows pH or EC/TDS with C
- Waterproof immersion proof casing (also floats)
- Replaceable pH electrode cartridge
- Automatic calibration & temperature compensation

	HI98129	HI98130
Range	EC: 0 to 3999µS/cm TDS: 0 to 2000ppm pH: 0 to 14pH Temp: 0 to +60°C and 32 to +140°F both meters	0 to 20mS/cm 0 to 10ppt 0 to 14pH
Resolution	EC: 1µS/cm TDS: 1ppm pH: 0.01pH Temp: 0.1°C & 0.1°F	0.01mS/cm 0.01ppt 0.01pH 0.1°C & 0.1°F
Accuracy	EC/TDS: ±2% full scale both meters pH: ±0.05pH both meters Temp: ±0.5°C or ±°F	
Calibration	1 or 2 points automatic for pH, 1 point automatic for pH, 1 point automatic for EC/TDS	
Compensation	Temperature automatically compensated for in all ranges	
Electrode	HI73127 pH electrode cartridge (supplied)	
Power Supply	4x1.5v batteries, 100 hours use	

These pocket meters are fully automatic and combine several parameters within a compact and waterproof case. Temperature compensation and calibration is automatic and the meters also incorporate a reading stability indicator to ensure false readings are not taken. Measure either pH, conductivity or Total Dissolves Solids together with temperature in either °C or °F. All readings are clearly shown on the dual level LCD display.

339518

Description	Mftrs. List No.	Order Code	Price Each 1+
Combo Meter	HI98129	**505-7437**	
Combo Meter	HI98130	**505-7449**	
Electrode Cleaning Soln	HI7061	**505-7292**	

Hand-Held Conductivity Meter

HI 8733

Designed for use in quality control, industry, production areas, general laboratory and field use, the HI-8733 uses a single, easy-to-clean multirange PVC probe with four stainless steel rings to measure from de-ionised water to brine. Single point calibration gives accurate readings accross the entire range and a built-in temperature sensor provides automatic temperature compensation. Temperature coefficient is adjustable from 0 to 2.5% /°C. Supplied complete with probe and battery.

- Microprocessor hand-held conductivity meter
- Single probe covers the range: de-ionised water to brine
- Single point calibration
- Automatic temperature compensation

Range	0.0 to 199.9µ S/cm 0 to 1999µS/cm 0.00 to 19.99mS/cm 0.0 to 199.9mS/cm
Resolution	0.1µS/cm, 1µS/cm, 0.01mS/cm, 0.1mS/cm
Accuracy	± 1% full scale
Calibration	Manual single point through trimmer
Temperature compensation	Automatic with a compensation of 0 to 2.5% per °C
Battery type / life	9V PP3, 100 hours
Dimensions	185 x 82 x 45mm
Mftrs. List No.	HI-8733
Weight	355g

224545

Order Code	Price Each 1+
710-7110	

Combined pH/Conductivity/TDS Meter and Thermometer HI-991300

Simply press a button to go from one parameter to the next. Calibration is automatic for ease of use with auto-buffer recognition. The LCD is dual level with a continuous temperature display in either °C or °F, and with a stability indicator to ensure accuracy. Ideal for industrial, production and field use, saving both time and resources. Supplied with combination probe/electrode and battery.

- Measuring pH, conductivity, TDS and temperature all with one probe

		Resolution	Accuracy
Range pH	0pH to 14pH	0.01	±0.02
Conductivity	0 - 3999 µS/cm	1 µS/cm	2% full scale
	0 - 1999ppm	1ppm	
Temperature °C	0 - 60°	0.1	±0.5

Calibration 1 or 2pt(4.01, 6.86, 7.01, 9.18, 10.01) Battery/life 4 x AAA, 500h
Conductivity 1 pt at 1382ppm or 1413µS/cm

224550

Mftrs. List No.	Order Code	Price Each 1+
HI-991300	**327-7197**	

Pre-mixed Calibration Solution

pH and Conductivity

- 460ml plastic screw top bottles
- Available for both conductivity and pH calibration
- Ready to use calibration standards
- Supplied with calibration chart

222570

pH buffer solution	Order Code	Price Each 1+
pH4.01	**710-5423**	
pH7.01	**710-5435**	
pH10.01	**710-5447**	
Conductivity calibration solution		
1413 µS/cm	**710-7377**	
84 µS/cm	**710-7389**	

Moisture Meters

Moisture Meter

Measures the moisture level in sawn timber (also cardboard or paper) and hardened materials (plaster, concrete and mortar).

W=47 H=139 D=25mm. Weight 93g

Measuring Principle	Electrical Resistance	Accuracy	Wood: ±1% Material: ±0.05%
Electrodes	8mm integrated electrodes, replaceable	Power	3 x AAA
Measuring Range	Wood: 6-44% Material 0.2-2%		

446883.430817

Order Code	Price Each 1+
127-0535	

Moisture Meter

- 2-in-1 digital and analogue moisture meter
- Large LCD display
- Wood - Range: 6-44% Accuracy: ±1%
- Material - Range: 0.2-2% Accuracy: ±0.05%
- Dimensions (WxHxD): 40 x 130 x 33mm. Weight 99g

486672.465666

Order Code	Price Each 1+	5+
143-0726		

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Pocket Moisture Meters

606-1 & 606-2

Available in two models:
606-1 material moisture
606-2 material moisture, air temperature and humidity

- Measurement of wood moisture e.g. beech, spruce, larch, oak, pine
- and maple
- Curves for cement screed, concrete, plaster, anhydrite, cement mortar, lime and brick
- Hold and auto-test functions
- Backlit display
- Auto-off

606-2 Additional features:

- Air temperature and humidity measurement for monitoring drying processes

Both models supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

	Moisture	Air Humidity (606-2 only)	Air Temp. (606-2 only)
Measuring Range	0 to 90%	0 to 100%rh	-10 to 50°C
Resolution	0.1	0.1%rh	0.1°C
Accuracy	± 1% (Conductivity)	± 2.5%rh (5 to 95%rF	± 0.5°C
Units	-	%rh, wet bulb, dewpoint	°C/°F
Operating Temperature	-10 to 50°C		
Battery Type	Alkaline (2 x AAA)		
Battery Life	200hrs (606-1), 130hrs (606-2) (average, without display illumination)		
Dimensions	119 x 46 x 25mm (Incl. Protective Cap)		

488398.503097

Mftrs. List No.	Order Code	Price Each 1+
606-1	**147-1400**	
606-2	**147-1401**	

Pressure & Calibration

Pocket Manometer - Differential Pressure

510

- Measuring range of 0 to 100 mbar
- Temperature compensation
- Magnetic base for hands free instrument mounting
- Flow velocity measurement with Pitot tube
- Air density compensation
- Backlit display
- Auto-off

Supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

Measuring Range	0 to 100 mbar
Resolution	0.01 mbar
Accuracy	± 0.03 mbar (0 to 0.30 mbar) ± 0.05 mbar (0.31 to 1.00 mbar) ± 0.1mbar +1.5% of m.v. (1.01 mbar to 100 mbar)
Units	hPa, mbar, Pa, mmH2O, mmHg, inH_2O, inHg, psi, m/s, fpm
Operating Temperature	0 to 50°C
Battery Type	Alkaline (2 x AAA)
Battery Life	500 hrs (average, without display illumination)
Dimensions (Incl. Protective Cap)	119 x 46 x 25mm

488182.503092

Mftrs. List No.	Order Code	Price Each 1+
510	**147-1394**	

Pocket Manometer - Absolute Pressure

511

- Measures absolute pressure - For absolute pressure compensation at duct measurements with pilot tube
- Calculation of barometric pressure
- Barometric altitude measurement
- Backlit display
- Auto-off

Supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

Measuring Range	300 to 1,200 mbar
Resolution	0.01 mbar
Accuracy	± 3.0mbar
Units	hPa, mbar, Pa, mmH2O, mmHg, inH_2O, inHg, psi, m, ft
Operating Temperature	0 to 50°C
Battery Type	Alkaline (2 x AAA)
Battery Life	500 hrs (average, without display illumination)
Dimensions (Incl. Protective Cap)	119 x 46 x 25mm

488347.503093

Mftrs. List No.	Order Code	Price Each 1+
511	**147-1395**	

Pressure and Flow Meters

512

A range of 4 instruments for the measurement of pressure and velocity. All of the instruments can be used with the testo printer (836-9240) to provide on-site documentation of readings with date/time and minimum/maximum values. Also available is a TopSafe case (108-2989) to protect your instrument from dirt, water and impact.

W=57 H=202 D=42mm.
Weight 300g

- Simultaneous display of flow and pressure value
- 8 units for pressure: kPa, mbar, bar, mm H2O, mmHg, psi, inch H2O, inch Hg
- 2 units for flow: m/s, fpm
- Built-in density compensation
- Smoothing adjustable between 1 to 20 display refreshes (0.5 s) as rolling mean
- Readings printout with date/time and min./max. values
- Hold/Max/Min function
- Backlit display
- 2 years warranty

Model	108-3007	108-3008	108-3009	108-3010
Pressure Measurement				
Probe Type		Built-in Pressure Probe		
Measuring Range	0mbar to 2mbar	0mbar to 20mbar	0mbar to 200mbar	0mbar to 2bar
Resolution	0.001 mbar	0.01 mbar	0.1 mbar	1 mbar
Overload	±10 mbar	±200 mbar	±2000 mbar	±4000 mbar
Flow Measurement				
Probe Type	Pitot Tube	Pitot Tube	Pitot Tube	No Flow
Measuring Range	2 to 17.5 m/s	5 to 55 m/s	10 to 100 m/s	
Resolution	0.1 m/s	0.1 m/s	0.1 m/s	
General Specifications				
Accuracy ±1 digit	0.5% of fsv	0.5% of fsv	0.5% of fsv	0.5% of fsv
Operating Temperature	0 to 60°C	0 to 60°C	0 to 60°C	0 to 60°C
Battery Life	120 hours	120 hours	120 hours	120 hours

418790

Description	Order Code	Price Each 1+
Manometer, 0-2mbar	**108-3007**	
Manometer, 0-20mbar	**108-3008**	
Manometer, 0-200mbar	**108-3009**	
Manometer, 0-2000mbar	**108-3010**	
Accessories		
Meter / Probes Case	**108-3011**	
Protective Case	**108-2989**	

Hand Held Digital Manometers

2000 Series

Digitron

The 2000P series of hand held manometers represents a new standard in pressure measurement, ease of use and accuracy of reading. Selected models feature automatic leak testing and logging

- Pressure ranges from 25mbar to 7 bar
- Scales in mbar, bar, psi, inH2O, in HG, mmH2O, mH_2O, mm/cm/mHg, Pa and kPa
- Accuracy perfomance 0.2% of reading
- Automatic zero calibration for added accuracy
- Logging mode for storage, retrieval and output readings
- Long battery life 200 hours
- Sealed to **IP67**

Model	2001P	2002P	2003P	2005P	2021P	2022P	2023P	2081P	2082P	2083P
Operating Range	130 mBar	1999 mBar	7 Bar	7 Bar	Selectable Scale	Selectable Scale	Selectable Scale	Selectable Scale	Selectable Scale	Selectable Scale
Backlight	●	●	●	●	●	●	●	●	●	●
Zeroing	●	●	●	●	●	●	●	●	●	●
Hold	●	●	●	●	●	●	●	●	●	●
Range Lock	●	●	●	●	●	●	●	●	●	●
Max/Min					●	●	●	●	●	●
Smoothing					●	●	●	●	●	●
Units of Pressure					●	●	●	●	●	●
Datalogging								●	●	●

Operating Temperature 0°C to 50°C Battery Type 2AA

Pressure & Calibration - continued

Hand Held Digital Manometers - continued

2000 Series - continued

493259

Mftrs. List No.		Order Code	Price Each 1+
2001P	(SC6/NC6)	151-1085	
2002P	(SC6/NC6)	151-1086	
2003P	(SC6/NC6)	151-1088	
2005P	(SC7/NC7)	151-1089	
2021P	(SC8/NC8)	300-3360	
2022P	(SC6/NC6)	493-855	
2023P	(SC8/NC8)	493-867	
2081P	(SC8/NC8)	493-879	
2082P	(SC8/NC8)	493-880	
2083P	(SC8/NC8)	207-597	

			Price Each
Standard Calibration Charge	S	C6	
Standard Calibration Charge	S	C7	
Standard Calibration Charge	S	C8	
UKAS Calibration Charge	N	C6	
UKAS Calibration Charge	N	C7	
UKAS Calibration Charge	N	C8	

Differential Manometers

digitron

PM Series

Using measurement technology developed from the 2000 Series the PM range offers good performance at an affordable price. Specifically designed for engineers using twin tube connections, the PM range is ideal for soundness testing and setting up boiler differential gas pressures. Manufactured from tough ABS plastic, this water-resistant instrument is supplied with a rubber boot to provide added protection during routine use. It can be magnetically attached for ease of use, and the back lit LCD allows easy viewing of the display in poor light conditions.
The PM series is a suitable replacement for the conventional U-tube, having a fast response coupled with high accuracy and at low cost. Instruments are available with alternative pressure measurement units as factory set options or as a selectable option on the PM-80 which also incorporates a smoothing and min/max function.

- Differential Input - 8mm tube connectors
- Water Resistant (IP67 rated)
- Rugged case with protective rubber boot
- Magnetic attachment or tilt stand
- Push button Zero and Hold features
- Backlit Digital Display
- Auto Power Off after 12 minutes
- 0.01 resolution up to 19.99 mbar, then auto switches to 0.1 resolution
- Measurement unit options (Selectable on the PM80)

Operating temperature	-10°C to 50°C (ambient)
Battery type	2x AA (supplied)
Battery life	Approx 200 hours
Display	12.7mm custom LCD
Environmental	Water resistant (IP67 with hoses connected)
Auto power off	12 minutes
Accuracy	0.2% of reading+0.2 of full scale +1 digit (over -10 to 50°C)
Resolution	0.01 up to 19.99mbar then auto ranges to 0.1 up to 130mbar
Dimensions	155x67x40mm
Weight	180g
Units of measurement	PM20 - mbar
Selectable	PM80

339435

Mftrs. List No.	Order Code	Price Each 1+
PM20 mbar	500-4536	
PM80 selectable	500-4603	

Intrinsically Safe Digital Manometers

Digitron

P200 Series

IS certified by BASEEFA for use in inflammable or explosive atmospheres, the units are classified as EEx ia IIC T4. This certification is equivalent to EN 50 014:1997 + Amendments 1&2 and EN50 020:2002. The units are ready for site use anywhere, immediately. P200 instruments are suitable for use with non-corrosive, non-ionic liquids and gases. Liquid pressure can be measured using an air buffer. Case proven their tough construction makes them extremely durable and, therefore functional in not only hazardous atmospheres but also rough environments.

- Certified to EEx ia IIC T4
- High accuracy
- Choice of pressure ranges
- Robust case
- Clear, digital display
- Battery low indication
- Auto range
- Quality electronics give excellent reliability
- Easy to use

Model	P200 AHIS	P200 ULIS
Operating Range (Low Range)	0 to 199.9 mBar	0 to 19.99 mBar
Operating Range (High Range)	0 to 2 Bar absolute	0 to 100 mBar
Accuracy	±(0.1%rdg + 0.1%fs + 1d) (20 to 30°C) ±(0.15%rdg + 0.15%fs + 1d) (-20 to 50°C)	
Maximum Over Pressure	4000 mBar	1000 mBar
Battery	9V PP3 giving approx. 100 hours life	
Dimensions (WxHxD)	70 x 140 x 26mm	
Weight	250g	

493315

Mftrs. List No.	Order Code	Price Each 1+
P200AHIS	151-1083	
P200ULIS	151-1084	

Pressure Calibrator

FLUKE

Fluke 718 30/100 psi

The new Fluke 718 Pressure Calibrator presents a fresh alternative in pressure calibration. A complete, self-contained calibration solution, the 718 offers:

- Built-in pressure/vacuum hand pump, with vernier and bleed valve
- Pressure measurement to 0.05% of full span, using an internal pressure sensor
- Wide range of selectable measurement units for pressure
- Current measurement with 0.025% accuracy and 0.001 mA resolution
- 24 volt loop power supply
- Min-Max Hold functions
- Compact size and weight
- Simple, push-button user interface
- Rugged and reliable, for field use

Operating Modes
Measure pressure (using internal sensor)
Measure current
Measure current and supply loop power
Pressure Specifications (internal sensor

Range	Resolution	Accuracy
0-30psi (207kpa)	.001psi (.01kPa)	.05%FS
0-100psi (690kpa)	.01psi (.01kPa)	.05%FS

Temp Coeff.
-10 to 18°C ±.01% of range per °C
28 to 55°C

Engineering Units (in Hg)
PSI, in. H20 (4°C) in H20 (20°C), kPa, cm H20 (4°C), cm H20 (20°C), BAR, mBAR, kg/cm2, mmHg, in Hg

Media
Gasses/Liquids (non corrosive)

Pressure
F.S. on 30G
F.S. on 100G
Current Specifications

Range	Resolution	mA +5°C	Temp Coeff. 18°C/to 55°C
0 to 24mA	.001mA	.025% Rdg +1 count	+/- .005% or range per °C

Input/Output

Pressure Input	1/8 in. NPT pressure fitting
Pressure module	input LEMO connector
Current input	shrouded banana jacks

Loop Supply

Voltage No.	24 Volts
Power	Two 9 volt alkaline batteries ANSI/NEDA 1604A or IEC 6LR619V
Battery Life	4 to 20 hours, depending on functions used
Safety	CSA C22.2 No. 1010.1:1992
EMC	EN50082-1:1992 and EN55022:1994 Class B

228159

Mftrs. List No.	Order Code	Price Each 1+
FLUKE 718/30	318-3324	
FLUKE 718/100	318-3336	

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Fluke Pressure Calibrators

719-100G

- Electric pump for one handed pressure calibration
- Best in class pressure measurement uncertainty of 0.025%
- Measure and source mA with best in class 0.015% accuracy
- Precision pressure adjust vernier
- Variable release rate bleed valve for easy pressure adjustment
- Ideal performance for high accuracy transmitter calibration
- 30 PSI and 100 PSI pressure ranges
- Programmable pump limit
  - Eliminates over-pressurization
  - Allows the user to program target pressures for pumping
- Extended measurement range with any of twenty-nine (29) 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to test valves and I/Ps
- Simulate mA signals to troubleshoot 4-20 mA loops
- Test pressure switches with built n switch test function
- Power transmitters during test using 24 V loop supply
- Proven cleanout ports reduce pump failures

Includes: TL75 Test leads, AC72 Alligator clip set, Push fit connectors, Translucent test hose, Product overview manual (print), and User's manual (CD-ROM) in 14 languages

General specifications

Storage temperature:	-30 °C to 60 °C
Operating temperature:	-10 °C to 55 °C
Relative humidity:	95 % (-10 °C to 30 °C); 75 % (30 °C to 40 °C); 45 % (40 °C to 50 °C); 35 % (50 °C to 55 °C)
Shock:	1 meter drop test
Safety:	CSA C22.2 No. 1010.1:1992
EMC:	EN50082-1:1992 and EN55022:1994 Class B
Size (HxWxD):	210 mm x 87 mm x 60 mm
Weight:	912 g
Battery:	Two 9 V alkaline batteries
Battery life:	12 hours with 12 mA into 500 Ω, 200 pump cycles to 100 psi, 500 pump cycles to 30 psi

Specifications

Function	Range	Resolution	Accuracy
Measure or Source			
Fluke-719 30G	-12 to 36 psi, -850 mbar to 2.4 bar	0.001 psi, 0.1 mbar	0.025 % range for 6 months.
Fluke-719 100G	-12 to 120 psi, -850 mbar to 8 bar	0.01 psi, 1 mbar	0.035 % of range for one (1) year
Loop supply	24 V dc	N/A	± 10 %

524988

Mftrs. List No.	Order Code	Price Each 1+
FLUKE-719 30G	**165-9632**	
FLUKE-719 100G	**165-9633**	

Sound Level

Analogue Sound Level Meter

- Analogue sound level meter ideal for monitoring noise levels in the work place
- Measurements are indicated on a clear graduated scale
- Calibration can be checked and adjusted via an internal sine wave oscillator
- Supplied with a soft carry case
- Requires a 9V PP3 heavy duty battery

Range	40 to 80dB (Lo) / 80 to 120dB (Hi)
Resolution	2dB increments
Accuracy	± 3% to JISdB(A) standard

224561

Order Code	Price Each 1+
723-0564	

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Digital Sound Level Meter

Compact sound level meter measures less than 9" in length, including the windscreen, yet provides selectable response time and frequency weighting. It is perfect for sound system testing, speaker system measurement and environmental noise level monitoring.

NEW

- Selectable MAX hold and data hold function
- Two measurement ranges
- Large 3/4" digit LCD backlit display
- Threaded insert for tripod mount
- Auto power off
- 1999 count display with 0.1dB resolution
- Removable windscreen

Frequency range	31.5Hz to 8kHz
Measuring level range	30dB to 130dB
Frequency weighting	A/C
Microphone	12.7mm electret condenser
Display	LCD
Display count	1999
Time weighting	FAST (125mS), SLOW (1 sec.)
Level ranges	Lo: 30dB to 100dB Hi: 60dB to 130dB
Accuracy	±1.5dB @ 1kHz
Power supply	9V battery
Operating temperature	0°C to 40°C
Dimensions	209.55 x 57.15 x 31.75mm
Weight	230g

Kit Contents: Sound Meter, 9V Battery, Carrying Case and Instruction Manual.

653363

Mftrs. List No.	Description	Order Code	Price Each 1+
72-942	Sound Level Meter	**208-3810**	
			Price Each
Standard Calibration Charge		S C21	

Digital Sound Level Meter

USB Interface

NEW

- USB interface with datalogging software
- Internal datalogging
- A and C weighting
- Selectable fast / slow response time
- Large 1999 count backlit LCD display
- Analog bargraph display and numerous on-screen icons
- AC/DC outputs for level recorder
- Self calibration with internal oscillator
- Selectable MIN or MAX hold and data hold function
- Three measurement ranges
- 0.1dB resolution
- Selectable auto-power-off
- Threaded insert which accepts standard tripod mount
- Removable windscreen

Kit Contents: Sound Meter, Windscreen, USB Cable, Software, 9V Battery, Case and Instruction Manual.

Frequency range	31.5Hz to 8kHz	Accuracy	±1.4dB @ 1kHz
Measuring level range	30dB to 130dB	AC output	1Vrms at full scale, output impedance approximately 100Ω
Frequency weighting	A/C	DC output	10mV / dB, output impedance approx 1kΩ
Microphone	12.7mm electret condenser	Power supply	9V battery or AC adaptor
Display	LCD	Operating temperature	0°C to 40°C
Display count	1999	Dimensions	247.65 x 63.5 x 25.4mm
Time weighting	FAST (125mS), SLOW (1 sec.)	Weight	350g
Level ranges	Lo: 30dB to 100dB Med: 50dB to 100dB Hi: 60dB to 130dB Auto: 30dB to 130dB		

653368

Mftrs. List No.	Description	Order Code	Price Each 1+
72-947	Sound Level Meter	**208-3812**	
			Price Each
Standard Calibration Charge		S C21	

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Sound Level - continued

Sound Level Calibrator

TENMA

NEW

- 94dB and 114dB Sound Calibration at 1kHz
- Accurate and simple to use
- Fits 1/2" diameter microphone

Output sound pressure levels	114dB and 94dB re 20 µPa under reference conditions
Output frequency	1000Hz, ±4%
Reference temperature conditions	> 23°C (73°F)
Atmospheric pressure	> 1013 mbar (760mm of Hg)
Relative humidity	> 65%RH
Accuracy of sound pressure level	±0.5dB Under stand reference environment conditions

653751

Mftrs. List No.	Description	Order Code	Price Each 1+
72-853	Sound Level Calibrator	208-3811	

Sound Meter

AMPROBE

- Designed to meet the measurement requirements of Safety Engineers, Health, Industrial safety offices and quality control in various environments.
- A and C weightings for checking compliance with safety regulations as well as acoustic analysis
- Measuring ranges:
  A Weighting 30 ~130dB
  C Weighting 35~130dB
- Frequency range: 31.5Hz~8KHz
- Display with 0.1dB steps on a 4 digits LCD
- Slow (1 sec) and fast (125ms) response settings to check peak and average noise levels
- MAX/MIN recording
- Data Hold to freeze reading on digital display
- Accessories supplied: Carrying case, windscreen, user manual and 9V Battery
- CE, designed to meet IEC651 Type2, ANSI S1.4 Type2

525726

Mftrs. List No.	Order Code	Price Each 1+
SM-10	167-1225	

		Price Each
Standard Calibration Charge	S C21	

Sound Level Meter

- Complies to IEC61672-1 class 2, ANSI S1.4 class 2
- ½" electret condenser microphone
- MAX and MIN measurements
- Over and Under range display
- Frequency weighting A and C to respond for human sense or machine monitoring
- Fast and slow time constant setting
- AC/DC voltage outputs for attachment to frequency analyser etc
- Auto or manual ranging
- Large backlit LCD display with Bargraph
- User calibration via externally accessible potentiometer

Level Range	30 - 130dB	Time Weighting	Fast (125ms), Slow (1s)
Dynamic Range	50dB	Display Update	2 times per second
Accuracy	±1.4dB	Analogue Output	AC = $1V_{rms}$, DC = 10mV/dB
Resolution	0.1dB	Dimensions (WxHxD)	76 x 278 x 50mm
Frequency Range	31.5Hz to 8kHz	Weight	350g
Frequency Weighting	A, C		

Includes: tripod, windshield, battery, UK mains adaptor, 2m USB cable, software CD, instruction manual and carry case

486564.465171

Order Code	Price Each 1+	3+
143-0720		

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Digital Sound Lever Meter

TENMA

An easy to use, hand-held, digital sound level meter.

- A weighting
- 3 ranges, 35-130dB measurement
- 3½ digit LCD
- Fast response
- Meets **IEC 651** type 2 standards
- Over and under range indicator
- Data hold
- Includes owner manual
- Requires 9V battery (not included)
- **CE** marked

Range	35-80dB/50-100dB/80-130dB
Resolution	0.1dB
Accuracy	± 1.5dB at 1kHz(94dB level)

H=25, W=67

228191

Mftrs. List No.	Order Code	Price Each 1+
72 - 6635	356-2657	
PP3 Battery	378-5786	

Digital Sound Level Meter

TENMA

72-860A

The 72-860A is a hand held, general purpose sound meter for type 2 measurement.

- A and C weighting
- 35½ digit LCD
- 35-130dB measurement
- 2 ranges
- Meets **IEC 651 type 2** standards
- ½" condenser microphone
- Fast and slow dynamic response
- Over and under range indicator
- Maximum level hold
- Internal oscillator for calibration
- AC and DC signal output
- RS232 interface
- Includes owners manual, 9V battery, carrying case, RS232 interface cable wind screen and adjustment screwdriver

Range	35-90dB(low),75-130dB(high)
Resolution	0.1dB
Frequency Range	30Hz to 12kHz
Accuracy	± 2.0dB at 1kHz(94dB level)
AC output	0.65 V RMS corresponding to each range step
DC output	10mV/dBm nominal
Dimensions	66.68 (W) X 241.3 (L) X 25.4 (H)

336783.343913

Mftrs. List No.	Order Code	Price Each 1+
72-860A	490-8430	

Sound Level Meters

testo

815

testo 815: The ideal instrument for daily use. Whether it is for air conditioning or heating, disco noise, machine noise or noise in combustion systems.

Common Features:

- Accuracy class 2 according to IEC 60651
- Easy to adjust (calibration screwdriver included)
- Frequency weighting according to characteristic line A and C
- Max / Min memory
- Built-in stand screw /(1/4 inch)
- Switchable time weighting Fast / Slow

Measuring Range		32 to 130dB°C	
Accuracy ±1 digit		Class 2 ± 1.0dB	
Resolution		0.1dB	
Battery Life		70 hours	

W=55 H=255
D=43mm. Weight 195g

Sound Level Calibrator:
Sound level measuring instruments should be re-calibrated in case of changes in place or temperature. With the help of the calibrator, available as an accessory, both instruments can easily be controlled and adjusted. Two levels can be adjusted (94 and 114 dB). It is as well suited for 1/2 inch and 1 inch microphones of other makes.

Accuracy	± 0.5dB
Sound Pressure Level	94dB / 114dB switchable
Frequency	1kHz
Battery Life	40 hours

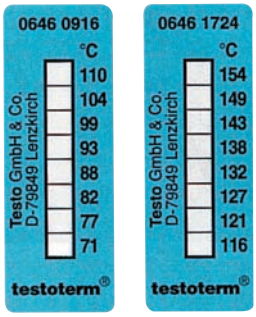
RoHS Compliant Non-compliant

418997

Description	Order Code	Price Each 1+
815 Sound Level Meter	108-3015	
Sound Level Calibrator	108-3018	

Thermometers

Thermometer Strips



These self-adhesive thermometer foils are ideal for situations in which ordinary thermometers cannot be used, such as small or moving parts. Once the temperature sensitive elements react there is a colour change (to black) – this is permanent and is irreversible.

- Supplied in booklets of 10

Size 50 x 18mm
Accuracy ±1°C of temperature rating
Storage Up to 2 years (longer if stored in a fridge)
Maximum storage temperature 25°C

339938.268073

Temperature Range	Order Code	Price Each 1+
Range: +116°C to +154°C	499-0389	
Range: +160°C to +199°C	499-0390	

Wall Thermometer

General Purpose

- General purpose wall thermometer
- Red spirit filled in moulded plastic case
- Temperature range of -20°C to +50°C

224525

Order Code	Price Each 1+
722-6410	

'Quick Set' Max-Min. Thermometer

- Wall moumted max-min thermometer
- Retains both highest and lowest readings
- Easily resetable via push-button
- No separate magnet needed
- Temperature range of -30°C to +50°C

224526.410622

Order Code	Price Each 1+
722-6342	

TROUBLESHOOTING TIPS
Chat online to one of our technical engineers at **farnell.com**

Mercury Free Thermometer

12/408/3

Brannan

200mm white case with blue temperature scale and push button re-set. Unique blue filling (Patent pending no. 00/54014) for a safer environment

- Environmentally Friendly
- Reliable and Accurate
- Capable of Low Temperatures
- Easy to Read
- Push Button
- Centigrade and Fahrenheit Scale

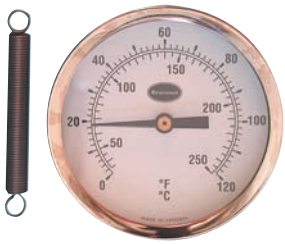
339920.277155

Mftrs. List No.	Order Code	Price Each 1+
12/408/3	505-3778	

Clip-on Pipe Thermometer

33/401/0

Brannan



A robust dial reading thermometer in a 63mm case with a chrome bezel and aluminium finish scale. A spring attachment on the back provides a secure fitting to pipework. Ideal for testing inlet and outlet pipework to boilers etc.

339923.277186

Mftrs. List No.	Order Code	Price Each 1+
33/401/0	505-3845	

Fridge/Freezer Thermometer

Brannan

- Horizontal fridge/freezer thermometer
- Moulded in food-safe white plastic
- Will hang or stand on shelf
- Zoned red scale (non toxic liquid) to indicate fridge and freezer storage temperatures

224528

Order Code	Price Each 1+
722-6366	

Pen Type Test Thermometer

31/160/0

Brannan

- 120mm stainless steel probe
- Battery included
- Range -50 to +150°C

446667.434979

Order Code	Price Each 1+
127-1860	

Waterproof Pen Type Thermometer

The thermometer offers low cost, rapid response, high accuracy and ease of use with a robust waterproof design. It is ideal for liquid and semi-solid sampling. The probe protection sheath has a vent hole in the end so that the instrument can be used as a stirrer and display the sample temperature. The sheath can be connected to the head of the unit and used as a handle extension. Powered by 1 x 1.5V button cell battery.

- IP-65 waterproof polycarbonate case and sheath
- Push button membrane keypad and display
- 133mm length, 4mm dia. stainless steel probe
- 10mm high contrast LCD display
- Supplied with probe protector sheath, battery and instructions for use

Thermometers - continued

Waterproof Pen Type Thermometer - continued

Range -50°C to +150°C
Resolution 0.1°C (-19.9° to 149°), 1° (others)
Accuracy ±1°C

333721.275379

Order Code	Price Each 1+
127-1859	

Pocket Digital Thermometer

digitron

FM10

- Low cost, high accuracy thermometer
- Water resistant
- Auto off after 35mins
- C/F selection
- Data hold

Temperature range -50°C to 150°C/58°F to 300°F
Resolution 0.1°C/F
Accuracy ± 1°C/± 2°F
Sampling time 1.5sec
Battery 1.5V button

339955.277395

Mftrs. List No.	Order Code	Price Each 1+
FM10	500-4469	

Probe Thermometers

AMPROBE

TPP-C Celsius

Celsius probe thermometers ideal for testing and troubleshooting as quick reference in HVAC and Industrial applications. Available as the TPP1-C1 for Immersion and TPP2-C1 for surface measurements.

- Temperature range -50 to 250°C
- 0.1°C resolution
- Data hold
- Overload display
- 3½ digit LCD
- Long battery life 200 hours typical
- CE rated
- Flat surface probe section
- Easy to read digital display
- Slim compact style

489622.502897

Description	Mftrs. List No.	Order Code	Price Each 1+
Immersion	TPP1-C1	146-6474	
Surface	TPP2-C1	146-6475	

Checkfridge Temperature Monitor

HANNA instruments

- Thermal probe with 1m cable designed to reach into refrigerators and freezers
- Thermistor probe made of fast responding food grade stainless steel and silicon cable are easy to keep clean
- Compact casing is durable and easy to keep clean
- Large, easy to read LED
- User can easily verify the status of the meter with Cal check feature
- Low battery warning "ERR" message displays when battery needs charging
- Magnetic backing provides an easy way to attach to metal refrigerators and freezers

Range	-50.0 to +220°C
Resolution	0.1° (-50 to 199.9°C), 1° (200 to 220°C)
Accuracy (@25°C/77°F)	±0.3°C (-20 to 90°C)
All other ranges	±0.4% F.S
Typical EMC Deviation	±0.3°C
Calibration	Internal 2 point
Calibration check	Manual with front mounted switch
Probe/Probe dimensions	Stainless steel, general purpose/ 40 x 5mm (1.5 x .187") and 1 meter silicon cable
Battery type/life	1 x 1.5V AAA / approximately 3000 hours of continuous use
Dimensions/Weight	92x36x28/65g

234811

Mftrs. List No.	Order Code	Price Each 1+
HI-14700	369-5918	

Min/Max Thermometer with Alarm

MST-9258

- 100mm x ∅4mm stainless steel penetration probe with handle and 1m cable
- Audible alarm at programmable high/low temperature limits
- Min/Max memory and data hold function
- Impact resistant case features desk stand and cable storage compartment
- Auto power off and low battery indication
- 30mm LCD display with function indicators
- One second sampling rate

W=60 H=120 D=20mm. Weight 77g

Range -50°C to +150°C
Resolution 0.1°C / 1°C
Accuracy 1°C
Battery 1.5V (included)

447222.435089

Order Code	Price Each 1+
127-6192	

Digital Thermometers

HANNA instruments

Check Temp

- Low cost high accuracy thermometer
- Fast acting stainless steel probe
- Inbuilt calibration test

Check temp: Stick meter with pointed tip probe
Check temp 1: With pointed tip probe and 1m cable

Range -50°C to +150°C
Resolution 0.1°C
Accuracy ±0.3°C (-20 to +90°C)
±0.5°C (-50 to +20°C)
±0.5°C (+91 to +150°C)3000
Battery-life 3000 hrs continuous
Weight 80g50

222470

Mftrs. List No.	Order Code	Price Each 1+
CHECKTEMP 1	710-5769	
CHECKTEMP	710-5757	

Hand-held Thermometer

digitron

FM31

- Supplied complete with hand-held instrument with Lumberg connector, rubber boot and general purpose probe
- Water resistant
- Auto off after 3 mins
- Open circuit indication

Thermistor probe range -40°C to +110°C
Accuracy 0.5%
Battery type PP3
Battery life 3000h

624189

Description	Mftrs. List No.	Order Code	Price Each 1+
Thermometer	FM31	465-8607	

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Temperature Probe Style Meter

AMPROBE

- Compact size goes and measures anywhere
- Dual display for RH and Temperature
- Put meter into metric or English for measurement results
- Stores Min/Max readings for comparisons
- Data Hold function

525732

Mftrs. List No.	Order Code	Price Each 1+
TH-1	167-1228	

RoHS Compliant Non-compliant

Digital Thermometer

2046T

An attractive, hand-held thermometer giving a reliable and cost effective solution to contact temperature measurements in a variety of applications including the food hygiene market. Thermistor probe based. Exceeds the recommendations in the Food Hygiene Regulations.

- Attractive, robust case design with strengthened display and re-enforced keypad
- Large LCD with backlight
- Suitable for use with thermistor type probes
- Autoranging display
- Display hold
- Self calibrated to zero to eliminate inaccurate readings caused by long-term or thermaldrift
- Selectable Auto switch-off
- Low battery indication
- 500 hours battery life (typical)
- Splashproof IP65 rated

Note: The thermometer is not supplied with a probe, see below for manufacturers recommended option.

Measurement Range	-40°C to +120°C	Power	1x 9V PP3 type battery – not supplied
Best Accuracy	±0.3%		

339932.268050

	Mftrs.		Price Each
Description	List No.	Order Code	1+
Thermometer	2046T.	**500-4275**	
Probe, General Purpose	H0234D	**877-1278**	

Digital Thermometer

- Ideal for education
- Uses a miniature silicon sensor which is precalibrated in factory to measure a wide temperature range
- Highly accurate with a very fast response time
- Sensor is housed in a rugged, stainless steel penetration probe
- Large LCD display provides clear, easy to read digits

Range	-40°C to +150°C	Battery life	approx. 900 hours
Resolution	0.1°C	Dimensions	180 x 180 x 40mm
Accuracy	0.5% for one year	Weight	280g

224539

		Price Each
Mftrs. List No.	Order Code	1+
HI-8751	**725-9256**	

Digital Thermometer

72-2060/72-2065

Rugged, K type single and dual input thermometer, ideal for field or bench use - includes protective holster.

- 3½ digit LCD
- Selectable °C/°F, 1° resolution
- Front panel offset adjustment
- Dual thermocouple input (72-2065)
- Displays T1 and T2 and T1-T2 in differential mode (72-2065)
- Data hold
- Maximum record
- Includes holster, 9V battery, owner manual, thermocouple probe (includes two thermocouple probe)

Temperature range	-50°C to +1300°C; -58 to 1999°F
Accuracy	-15°C to 0°C: ±2°C, 0°C to 1000°C: ±(0.3% + 1°C)
Dimensions	70 (W) x 146.05 (H) x 39 (D)

228184

	Mftrs.		Price Each
Description	List No.	Order Code	1+
Dual Channel	72-2065	**342-1569**	

Dual Channel Digital Thermometers

Models: 72-7712, 72-7715

Dual channel digital thermometers with backlit LCD displays and multiple probe type compatibility.

Model	**72-7712**	**72-7715**
Total Range	-250°C through +1372°C	-250°C through +1767°C
Best Accuracy	±0.5%	±0.2%
Resolution	0.1°C	0.1°C
Data Logging	100 samples	100 samples
General		
LCD Size (WxH)	32x30mm	
Dimensions (WxHxD)	85x175x30mm	
Weight	270g	

- 4 Digit LCD diplay with dual readings and backlight
- °C/°F/°K measurements
- Dual probe inputs
- K, J, T and E type probe compatibility
- Max/Min/Dif/Avg temperature display with hold function
- Sleep mode and low battery warning
- USB data transfer and datalogging (software supplied)
- USB or 9V battery Power
- Supplied with 9V battery, software, USB lead, K type probe and user manual

72-7715 Additional Features

- Hi/Lo alarm and signal output
- User self-calibration
- Additional R, S and N type probe compatibility

510032.509478

		Price Each
Mftrs. List No.	Order Code	1+
72-7712	**156-3717**	
72-7715	**156-3718**	

Digital Thermometer

KM340

- Type K thermocouple thermometer
- Selectable 0.1°/1° resolution
- Displays temperature in °C or °F
- Maximum temperature memory
- Hold function
- Protective slip-on boot with desk stand
- Sub-miniature connector
- Twin inputs (differential)
- For all HVAC usage including flow and return temperature measurements and radiator output checks

Sensor type	Thermocouple Type K	Accuracy	±(0.2% of reading +1°C)
Scales	°C / °F	Operating temperature	0 to +50°C
Measurement range	-50°C to +1300°C	Battery type	PP3, IEC 6LF22
Resolution	1° selectable KM340: 1°	Battery life	200 hours

382643

	Mftrs.		Price Each
Description	List No.	Order Code	1+
Differential thermometer	KM340	**858-8945**	
Surface probe	SK21M	**858-8961**	
Air probe	AK28M	**858-8988**	

K Type Thermometers

W=76 H=162 D=39mm. Weight 210g

These single and dual input K-Type thermometers offer high accuracy and fast response times. They are suitable for industrial and laboratory use.

- Measures in °C or °F (plus Kelvin for ATK-610B only). User selectable
- Impact-resistant ABS case with protective rubber holster & flip out stand
- 45mm LCD display with backlight and function indicators
- Sampling rate of 2.5 times per second
- Auto power off
- Max hold and data hold functions
- Over range indication
- Low battery indication
- Room temperature compensation (ATK-610B)
- ATK-612 Dual Input Thermometer accepts 2 inputs with individual measurements or as differential measurements, T1 minus T2
- Powered by 1x 9V battery (included)
- Supplied with carry case, rubber holster, 950mm bead probe & battery (2 bead probes with ATK-612)

Range	-50°C to + 1300°C (-58°F to 2000°F)	Accuracy	0.5% (0 - 1000°C)
Resolution	0.1°C / 1°C	Accuracy (Bead Probe)	±2.2°C or ±0.75% of rdg

450385.460944

	Mfrs.		Price Each
Description	List No.	Order Code	1+
Single Input	TK-610B	**129-7747**	
Dual Input	TK-612	**129-7748**	

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Thermometers - continued

High Accuracy Dual Input Thermometer

This dual input K-Type thermometer offers high accuracy and fast response times. Suitable for industrial and laboratory use.

- Measures in °C, °F or Kelvin, user selectable
- Impact-resistant ABS case with protective rubber holster and flip out stand
- 45mm LCD display with high intensity backlight and function indicators
- Sampling rate of 2.5 times per second
- Auto power off
- Max hold and data hold
- Over range indication
- Low battery indication
- Scan function for T1, T2, T1-T2, max, hold
- Room temperature compensation
- Dual Input Thermometer accepts 2 inputs with individual measurements or as differential measurements, T1 minus T2
- Supplied with carry case, rubber holster, 2 x 950mm bead probes & battery

Range	-200°C to +1372°C
Resolution	0.1°C / 1°C
Accuracy	0.5% (above -100°C)
Power	PP3 battery
Dimensions (WxHxD)	76 x 165 x 43mm
Weight	403g

480174.465850

Order Code	Price Each 1+
142-6143	

Hand Held Digital Thermometers

2000 Series

A new range of microprocessor thermometers with ease of use and accuracy of reading. The 2000T's ability to self calibrate achieves long-term accuracy and stability, and eliminates readings caused by long term drift. They have a robust design, strengthened display, re-enforced key pad and isolated battery compartment.

- SpeedRead for quicker readings
- Logging mode for storage, retrieval and output of readings
- Accurate performance: 0.2% of reading
- Automatic zero calibration
- Wide temperature range
- Last settings memorised
- Simple to operate
- Long battery life: typically 500 hours
- 200BT protective holder with tilt stand
- Three K type probes designed to give a long life. The handles are ultrasonically welded and can be scrub washed
- Rugged construction
- Fast response

Common Specification

Resolution	0.1° from -199.9°C to +199.9°C 1°C elsewhere
Operating temperature	-10°C to +50°C (ambient)
Battery type	2x AA batteries
Battery life	Typically 500 hours
Display	12.7mm custom LCD
Sensor open circuit	Indicated by O-C on display
Overrange/Underrange	Out displayed
Environmental	IP65
Auto switch off	12 minutes
Dimensions	155x67x40mm
Weight	180g

Instrument Accuracies

2000T and 2088T

Range	-200°C to +1350°C
Accuracy	0.1% rdg ±0.2°C above -100°C 0.5% rdg ±0.2°C below -100°C

2006T

Range	-250°C to +400°C
Accuracy	±0.2°C over range -20°C to +70°C 0.1% rdg ±0.2°C elsewhere

2029T and 2098T

K range	-200°C to +1350°C
T range	-250°C to +400°C
J range	-750°C to +750°C
N range	-200°C to +1300°C
R and S range	0°C to +1750°C
Accuracy	0.1% rdg ±0.2°C above -100°C 0.5% rdg ±0.2°C below -100°C

Series Option Table

Model	2000T	2006T	2088T	2029T	2098T
Sensor type	K	T	K	KT JNRS	KT JNRS
Connector type	2 pin mini	2 pin mini	2 pin mini	2 pin mini	2 pin mini
°C/°F			●	●	●
Hold	●	●	●	●	●
Range lock			●	●	●
Max./Min			●	●	●
Averaging					●
Logging			●		●

222543

Mftrs. List No.	Order Code	Price Each 1+
2000T	493-508	
2006T	500-4366	
2029T	500-4391	
2098T	493-521	
K0234 Type K general probe	493-533	

Microprocessor Thermocouple Thermometers

- Range -200 to 1370°C
- Resolution of 0.1 to 999.9°C
- Use with any K type probe
- K type with HI/LO recall
- K type dual input
- KJT type

Easy to use, splashproof thermometers which fit comfortably in the hand with a wrist strap for security and optional protective rubber holster. Microprocessor controlled for 0.1 resolution, high accuracy and wide temperature range.
HI-93531 displays temperature in °C/°F and gives HI/LO temperature memory and HOLD button.

	HI-93531 & HI-93532
Range (K)	-200.0 to 1370°C/-300 to 2500°CF
(J)	
(T)	
Resolution	0.1°C (200 to 999.9°C), 1°C outside
Accuracy	0.2% FS
Battery life	1 x 9V/100h
Weight/Dimensions	320g/143 x80 x38mm

228212

Mftrs. List No.	Order Code	Price Each 1+
HI-93531K	356-5105	

Digital Thermometer

110

W=64 H=182 D=40mm.
Weight 171g

An affordable thermometer designed to provide accurate measurements for many general temperature applications. The instrument's robust engineering makes it ideal for refrigerated storage rooms, freezers/coolers, storage cabinets, and general outdoor use. In addition, the optional TopSafe protective case guards against damage from water, impact and dirt. Minimum and maximum values are shown on a clear, 2-line backlit display for easy reading. A wide choice of probes for a range of applications are available. In addition, the testo 110 can be upgraded for use with a wireless temperature probe.

- User-adjustable audible alarm limits aid in temperature control
- User-adjustable measuring rate (wireless mode) helps save battery power
- On-site documentation with the optional Testo printer, for easy temperature recording
- 2 years warranty

Probes:
In order to meet a wide spectrum of measuring requirements, Testo provides a large range of air, immersion, surface and penetration probes.

Description	Range	Accuracy	t_{99}	Order Code
NTC Surface Probe	-50°C to +150°C	± 0.2°C (-25 to 74.9°C)	35s	108-3805
NTC Immersion Probe	-50°C to +150°C	± 0.2°C (-25 to 74.9°C)	10s	108-3852

418987.429029

Description	Order Code	Price Each 1+
Digital Thermometer	108-3804	
Probes		
NTC Surface Probe	108-3805	
NTC Immersion Probe	108-3852	
Other Accessories		
Instrument and Probe Case	108-3011	

RoHS Compliant Non-compliant

Digital Thermometer

922 and 925

W=64 H=182 D=40mm. Weight 171g

Testo 922: A differential thermometer with 2-line display for easy temperature comparisons. An optional wireless temperature probe makes remote temperature monitoring easy. Differential temperatures are easily displayed, while an audible alarm sounds if user-adjustable limit values are exceeded. Current measurements and Max-Min values can be printed on-site with the optional Testo printer. Timed-interval printing (eg. once per minute) is possible and controlled from the testo 922.

- 2 channel measuring instrument with optional wireless probe
- Displays differential temperature
- Cyclical printing of readings, e.g. once a minute

Testo 925: 925 Type K thermocouple thermometer uses both corded and optional wireless probes. A user-adjustable audible alarm sounds if set limits are exceeded. Measurements, as well as Max-Min values, with time/date can be printed on-site with the optional Testo printer.

- 1 channel measuring instrument with optional wireless probe
- Audible alarm sounds if limit value is exceeded
- Continuous display of max/min values
- Hold button to freeze reading
- Backlit display
- 2 year warranty

Probe Type	Thermocouple Type K
Range	-50°C to +1000°C
Accuracy	0.3% ±(0.7°C + 0.5% of mv) (remaining range)
Resolution	0.1°C / 1°C
Battery Life	Upto 200 hours

Probes:

In order to meet a wide spectrum of measuring requirements, Testo provides a large range of professional probes for immersion, surface and air measurements.

Probe Type	Range	Accuracy	t_{99}	Order Code
Type K Fine Wire	-50°C to 400°C	Class 2	5s	561-642
Type K Air	-60 to 400°C	Class 2	25s	108-3022
Type K Surface	-60 to 300°C	Class 2	3s	108-3023

624209

Description	Order Code	Price Each 1+
922 Differential Thermo	**108-3019**	
925 Differential Thermo	**108-3020**	
Probes		
Type K Fine Wire Probe	**561-642**	
Type K Air Probe	**108-3022**	
Type K Surface Probe	**108-3023**	
Other Accessories		
Protective Case	**108-2989**	
IRDA Printer	**836-9240**	
		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Advanced Multi-channel Thermometer

735-2

A highly versatile multi-channel temperature measuring instrument. The instrument has the capability to register and display up to 6 temperature probes: 3 wireless probes, 2 fast thermocouple probes (Type K / T) and one high precision PT100 probe. The testo 735 has a large measuring range - from -200 to +1350 °C (dependent on probe used). Two freely selectable temperature values are shown in the easy to read backlit display.
The differential temperature between any temperature values can be calculated. The display of minimum or maximum values is possible for all temperature channels.
The testo 735 is designed for ease of use. The easy to follow menus allow users to take key measurements including time and point mean calculation, differential temperature measurement, max/min value display and the fixing of measurement values. The testo 735-2 offers 3 User Profiles (Standard, Route and Longterm) which can be tailored to suit specific applications. For example, using the Route function, users can easily select measurement locations and the Longterm function provides direct access to the number of measurements and the measurement rate.

W=74 H=220 D=46mm. Weight 428g

Features:

- Connection of 3 attachable probes and 3 radio probes
- Data printing on testo report printer
- Audible alarm when limit values are exceeded
- System accuracy up to 0.05°C
- Display of Delta T, min/max and mean values
- Instrument store for 10,000 readings
- PC-Software for filing and documenting measurement data
- Storage of single measurements or measurement series by location
- Quick access to the most important functions via user profiles

Applications:

- Simultaneous measurement of several temperatures, e.g. in a refridgeration system
- Fast temperature measurement on surfaces
- Precise temperature measurements

Probes:

In order to meet a wide spectrum of measuring requirements, Testo provides a large range of professional probes. The range includes a choice of PT100 and thermocouple (Type K / T) probes for immersion, surface and air measurements. Thermocouple probes offer users rapid measurements and a wide measuring range. The PT100 immersion/penetration probe offers high accuracy (up to 0.05°C, resolution of 0.001°C), ideally suited for use as a working standard in quality assurance, laboratories and calibration services.

Description	Range	Accuracy	t_{99}	Order Code
Type K Fine Wire Probe	-50°C to 400°C	Class 2	5s	561-642
Type K Air Probe	-60 to 400°C	Class 2	25s	108-3022
Type K Surface Probe	-60 to 300°C	Class 2	3s	108-3023
PT100 Immersion Probe	-50°C to +400°C	Class A	12s	108-3034

418940.429027

Description	Order Code	Price Each 1+
735-2 Multi-channel Thermometer	**108-3031**	
Probes		
Type K Fine Wire Probe	**561-642**	
Type K Air Probe	**108-3022**	
Type K Surface Probe	**108-3023**	
PT100 Immersion Probe	**108-3034**	

Digital Thermometers

Fluke 51II/Fluke 52 II

The new Fluke 50 Series II contact thermometers offer fast response and laboratory accuracy (0.05% +0.3°C) in a rugged handheld test tool

51 and 52 Series II:

- Large backlit dual display shows any combination of T1, T2 (52 only), T1-T2 (52 only) plus MIN, MAX, or AVG
- Relative time clock on MIN, MAX, and AVG provides a time reference for major events
- Electronic Offset function allows compensation of thermocouple errors to maximise overall accuracy
- Measures J, K, T and E-types of thermocouples
- Readout in °C, °F, or Kelvin (K)
- Sleep mode increases battery life
- Battery door allows easy battery replacement without breaking the calibration seal
- Optional Tool Pak accessory for hanging your thermometer (302-9578)

Temperature range

J-type Thermocouples	-210°C to 1200°C (-346°F to 2192°F)
K-type Thermocouples	-200°C to 1372°C (-328°F to 2501°F)
T-type Thermocouples	-250°C to 400°C (-418°F to 752°F)
E-type Thermocouples	-150°C to 1000°C (-238°F to 1832°F)

Temperature accuracy

Above -100°C (-148°F)	
J, K, T, E and N-type	± [0.05% +0.3°C (0.5°F)]
Below -100°C (-148°F)	J, K, E: ± [0.20% +0.3°C [0.5°F] T-type: ± [0.50% +0.3°C (0.5°F]
Battery life	1000 hours typical, AA
Weight	400g

624750

Mftrs. List No.	Order Code	Price Each 1+
FLUKE 51 SERIES II	**318-3361**	
FLUKE 52 SERIES II	**318-3373**	
TPAK	**302-9578**	
C101 Carry Case	**947-9783**	
		Price Each
Standard Calibration	S C4	
UKAS Calibration	N C10	

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Digital Thermometers

Fluke 53/54 Series II

FLUKE

The new Fluke 53/54 Series II contact thermometers offer fast response and laboratory accuracy (0.05% + 0.3°C) in a rugged hand-held test tool.

3 YEAR GUARANTEE

- Large backlit dual display shows any combination of T1, T2, T1-T2, plus MIN, Max or AVG
- Relative time clock on MIN, MAX and AVG provides a time reference for major events
- Electronic Offset function allows compensation of thermocouple error to maximize overall accuracy
- Measures J, K, T and E-types of thermocouples
- Readout in °C, °F or Kelvin (K)
- Sleep mode increases battery life
- Battery door allows easy battery replacement without breaking the calibration seal
- Optional Tool Pak accessory for hanging your thermometer (302-9578)
- Data Logging up to 500 points of data with user adjustable recording interval
- Additional thermocouple types R, S and N (for a total of 7 different types)
- Real time clock captures the exact time of day when events occur
- Recall funtion allows logged data to be easily reviewed on the meter display
- USB port allows data to be exported to optional Fluke View Temperature PC software

Fluke View Forms Software

Here's a fast and easy way to document, store and analyse temperature measurements.

- Produce professional-looking documents
- In-depth analysis with records, charts and graphs
- Standard and customisable forms
- Export data to the measurement analysis programs
- Supplied with USB cable

Thermocouple types	K, J, T, E, N, R, S	Min./Max./Avg recording	Yes
Number of inputs	53-II (Single), 54-II (Dual)	Compatible with optional toolpack	Yes
Time stamp	Time of day	Differential (T1-T2) readout	54-II only
Splash/dust resistant	Yes	Data logging up to 500 points	Yes
Dual display with backlight	Yes	IR data port for interface to PC	Yes

Temperature Range

J-type Thermocouples	-210°C to 1200°C (-346°F to 2192°F)
K-type Thermocouples	-200°C to 1372°C (-328°F to 2501°F)
T-type Thermocouples	-250°C to 400°C (-418°F to 752°F)
E-type Thermocouples	-150°C to 1000°C (-238°F to 1832°F)
N-type Thermocouples	-200°C to 1300°C (-328°F to 2372°F)
R and S-type Thermocouples	0°C to 1767°C (32°F to 3212°F)

Temperature Accuracy

Above - 100°C (-148°F):	
J, K, T, E and N-type	± [0.05% +0.3°C (0.5°F)]
R and S-type	± [0.05% +0.4°C (0.7°F)]
Below - 100°C (-148°F):	
J, K, E and N-types	± [0.20% +0.3°C (0.5°F)]
T-type	± [0.50% +0.3°C (0.5°F)]

Battery 1000 hours typical, AA Weight 400g Warranty 3 years

220406

Mftrs. List No.	Calibration Options	Order Code	Price Each 1+
FLUKE-53-2 B 50HZ	(SC8/NC8)	NEW 193-6624	
FLUKE-54-2 B 50HZ	(SC9/NC9)	NEW 193-6625	
FlukeView Forms Software	–	392-7921	
Meter Hanging Kit TPAK80-4	–	302-9578	
C101 Carry Case	–	947-9783	

			Price Each
Standard Calibration Charge	S	C8	
Standard Calibration Charge	S	C9	
UKAS Calibration Charge	N	C8	
UKAS Calibration Charge	N	C9	

Intrinsically Safe Thermometer

C9006IS

COMARK

- Electronic thermometer with type K, N, T, J, R and S thermocouple compatibility
- For use in hazardous areas such as refineries, petro-chemical plants and gas distribution
- Certified to II 1 G EEx ia IIC T4 Baseefa 03 ATEX 0056
- Dust and waterproof to IP67 (BS EN 60529, IEC529) standards
- Max, min temperature memory and hold functions
- Displays temperature in °C, °F and K
- Selectable auto switch off
- Sub-miniature connector

Thermocouple Type K	-200°C to +1372°C	Resolution	0.1° below +1000°, 1° above (autoranging)
Thermocouple Type N	-200°C to +1300°C		
Thermocouple Type T	-200°C to +400°C	Accuracy	<±0.1% ±0.2°C
Thermocouple Type J	-200°C to +1200°C	Operating Temperature	-20°C to +40°C
Thermocouple Type R and S	-50°C to +1767°C	Connector Type	Sub-miniature
Scales	°C, °F, °A		

382644

Description	Mftrs. List No.	Order Code	Price Each 1+
Thermometer	C9006IS	858-8953	
Surface probe	SK21M	858-8961	
Penetration probe	PK24M	858-8970	
Air probe	AK28M	858-8988	

Intrinsically-Safe Thermometer

3208IS

Digitron

This accurate and easy-to-use instrument is certified for use in flammable or explosive atmospheres up to and including Zone 0. The tough construction makes it extremely durable and therefore functional in not only hazardous atmospheres but also hostile working environments. To complement the 3208i.s the following probes are available:

S004K Surface probe providing a fast response and comprising a 3.5mm ½ disk to allow uniform pressure on surface to be measured.

S10PK Exposed junction thermocouple, PTFE-insulated for general-purpose use.

- Certified to ATex directive 94191EC
- High accuracy: 0.2% F.S. at ambient
- High and low resolution
- Wide temperature range
- Robust case
- One handed operation

Temperature range	-50°C to +950°C	Battery type	9V PP3
Sensor	Type Thermocouple Type K	Battery life	1000 hrs
Resolution HI	0.1°C ±0.2% reading ±0.5°C	Weight	250g
Resolution LO	1°C ±0.2% reading ±1°C	Environmental	**IP64**
Operating temperature (ambient)	0°C to +50°C		

223045

Description	Mftrs. List No.	Order Code	Price Each 1+
Meter	3208I.S	717-4123	
General Probe	K0234I/S	500-4342	
Surface probe	K0454D	717-4135	

Thermocouple Calibrator, DP6

CROPICO

The portable thermocouple calibrator is a compact and easy to use instrument that is equally at home in the laboratory or service environment. The DP6 will both measure and simulate the outputs from the 10 most popular thermocouple types, and may be scaled in °C, °F, °K or mV. Automatic reference junction compensation is provided with the option for manual value entry. For full portability the calibrator is powered by a rechargeable battery giving more than 15 hours continuous use. The DP6 is delivered in an ABS transport case which also houses the charger and a copper transition adapter for easy connection to miniature thermocouple plugs.

Key Feature:

- Linearised for 10 thermocouple types
- Measures and sources
- Calibrated to ITS90 and IPTS68
- Displays in °C, °F, °K and mV
- 1 micro volt Resolution
- Reference junction compensation
- Rechargeable battery
- Memory with 130 Stores
- Digital calibration

Display:
4.5 digit high contrast LCD 10.2mm. Display range 19999 digits, automatic decimal point, polarity and units. Two line alphanumeric LCD for programming and display of configuration

Ranges:
The reference junction reference value may also be set via the keyboard over the range 0°C to +100°C

Terminals:
2 4mm low thermal E.M.F . copper terminals

Storage Temperature:
-20°C to +50°C

Dimensions:
150mm x 130mm x 60mm (W H D) approx

DP6 Specifications

Range	Max Display	Uncertainty	Resolution
10mV	±15.000mV	±0.02% of reading ±0.015% FS	1µV
100mV	±150.00mV	±0.01% of reading ±0.015% FS	10µV
1V	±1.5000V	±0.01% of reading ±0.015% FS	100µV

538633

List No.	Mftrs. Order Code	Price Each 1+
930437	171-8668	

RoHS Compliant Non-compliant

Thermometers - Non Contact (IR)

Pocket Infrared Thermometer

- Easy to use: hold within 2 feet of the area being measured and push the button
- User selectable °C/°F
- Response time less than 1 second
- Large 12mm LCD display for readings and functions
- Automatic data hold
- Set min/max and lock
- Auto power off and low battery indication
- Impact-resistant ABS case
- Supplied with carry case, wrist strap & lithium battery

Measuring Range	-35°C to +230°C
Resolution	0.1°C
Accuracy	± (2%rdg + 2°C)
Emissivity	0.95, fixed
Battery	3V
Dimensions (WxHxD)	40 x 75 x 20mm
Weight	33g

This pocket size and easy-to-use infrared thermometer is ideal for precise non-contact measurement of surface temperatures. Suitable for monitoring appliances, heating, ventilation & air conditioning systems, food preparation and storage temperatures.

480460.465857

Order Code	Price Each 1+
142-6144	

Pocket Infrared Thermometer

A pocket size infrared thermometer that can check all typed of heating ventilation and air-conditioning (HVAC) systems. Monitor performance of appliances such as refrigerators, dishwashers, freezers and ovens to ensure proper cooking, grilling and storage temperatures.

- 6:1 distance to spot size ratio
- Easy to use
- Large LCD display
- Backlit display
- User selectable °C or °F
- Automatic data hold
- Auto power off
- Low battery indication

H=94, W=56, D=28mm
Weight = 76g

Range	-30 to + 270°C (-22 to +518°F)	Optical resolution	6:1 distance to spot size ratio
Basic accuracy	±2% of reading	Emissivity	0.95 fixed
Resolution	1°F/°C	Power	2x 1.5V AAA batteries (supplied)
Response time	< 1 second		

381015.345256

Order Code	Price Each 1+
838-8580	

Pocket Thermometer

810

- Surface temperature IR measurement with 1-point laser spot marking and 6:1 optics
- Air temperature measurement
- Display of differential temperature (e.g. between window and air)
- Hold function and max./min. values
- Backlit display
- Auto-off

Supplied with Calibration protocol, wrist strap, belt holder, protective cap & batteries

Surface Temperature

Measuring Range	-30°C to 300°C
Resolution	0.1°C
Accuracy	± 2.0°C (-30 to +100°C, ± 2% of m.v. remaining range)
Optics	6:1

Air Temperature

Measuring Range	-10 to 50°C
Resolution	0.1°C
Accuracy	± 0.5°C
Units	°C/°F

General Specifications

Operating Temperature	-10 to 50°C
Battery Type	Alkaline (2 x AAA)
Battery Life	50 hrs (average, without display illumination)
Dimensions (Incl. Protective Cap)	119 x 46 x 25mm

488395.503096

Mftrs. List No.	Order Code	Price Each 1+
810	147-1398	

Infrared Thermometer

FLUKE 61

The Fluke 61 thermometer provides a quick non-contact temperature measurement in a compact case surrounded with a protective holster. Targeting objects is easy with the bright laser beam activated via the simple push button operation. Even in the dark the display is simple to read with the quality backlit screen. Ideal for measuring surface temperatures of rotating, hard-to-reach, electrically live or dangerously hot targets.

- Shock-absorbing holster increases ruggedness
- Bright laser beam provides easy targeting
- Large display clearly supplies data at a glance
- Quality backlight illuminates the screen in the dark
- Automatic sleep mode after 15 seconds extends battery life
- Alkaline batteries provide over 4000 typical measurements
- Battery life: 12 hours with laser and backlight activated
- Dimensions (LxWxH): 184x45x38mm
- Weight: 227g

Ranges	-18°C to 275°C (0°F to 527°F)
Response Time	< 1 second
Resolution	0.2°
Repeatability	± 2° of reading or ± 2%, whichever is greater
Accuracy	Foar Targets at:
(Assumes ambient operating temperature of 23°C)	-18°C to -1°C (0°F to 30°F): ± 3° (± 5°F) -1°C to 275°C (30 to 527°F): ± 2% of reading or ± 2°C (± 3.5°F), whichever is greater
Optical resolution	8:1 Distance to spot size ratio
Emissivity	Fixed at 0.95
Minimum spot size	Minimum 200mm (spot 25mm)

333733

Mftrs. List No.	Order Code	Price Each 1+
FLUKE 61	397-0061	

Infrared Food Thermometers

FoodPro Series

FoodPro - Quick surface scanning
The perfect companion to contact thermometers

- Fast non-contact temperature measurement without danger of contamination
- Signals potentially risky temperatures with lighted LEDs
- Measurement spot illumination

FoodPro Plus - Complete food inspection
The all-in-one temperature monitoring tool
Features same as FoodPro with added:

- Integrated contact probe for confirmation of vital core temperatures
- Timer with alarm function

	FoodPro	FoodPro Plus
Infra red thermometer		
Temperature range	-30°C to +200°C	-35°C to +275°C
Accuracy	0 to +65°C: ±1°C <0°C: ±1°C ±0.1 degree/degree > 65°C: ±1.5% of reading	
Response time	<500ms after initial reading	
Spectral response	8 - 14µm	
Emissivity	Pre-set for food applications	
Distance to spot size	2.5:1 @ 90% energy	
Working range	25 to 250mm	
Minimum target size	12mm	
Illumination to IR channel offset	13mm	
Probe Thermometer		
Temperature Range	-	-40 to 200°C
Accuracy	-	-5 to +65: ±0.5°C
	-	<-5°C: ±1°C
	-	> 65°C: ±1% of reading
Response time	-	7 - 8 seconds (3 time constants)
Probe dimensions	-	ø: 3mm, Length: 80mm
Sensor type	-	Thin film platinum, class A RTD

339609.409820

Mftrs. List No.	Order Code	Price Each 1+
FP	127-2819	
FP PLUS	127-2820	

Thermometers - Non Contact (IR) - continued

Infrared Non Contact Thermometer

TENMA

Model: 72-820
A general purpose infrared, non-contact thermometer with adjustable emissivity. Simply target the unit using the built-in laser pointer and squeeze the trigger to take fast and accurate surface temperature measurements.

Range	-18°C to +550°C
Accuracy	±1.8%
Resolution	0.1°C
Repeatability	±0.5%
Emissivity	0.10 to 1.00
Responce Time	250ms
LCD size (WxH)	29x32mm
Dimensions (WxHxD)	53x169x138mm
Weight	270g

- 4 Digit LCD with backlight
- °C/°F measurements
- 12:1 distance to spot ratio
- Max/Min/Dif/Avg temperature display with hold function
- Sleep mode and low battery warning
- USB or 9V battery power
- Tripod mount
- Supplied with 9V battery, carry bag, USB lead and user manual

510028.509462

Description	Order Code	Price Each 1+
Infrared Thermometer	**156-3715**	

Infrared Non Contact Thermometer

TENMA

Model: 72-823
A general purpose infrared, non-contact thermometer with a wide temperature measurement range. Simply target the unit using the built-in laser pointer and squeeze the trigger to take fast and accurate surface temperature measurements.

Range	-32°C to +650°C
Accuracy	±1.8%
Resolution	0.1°C
Repeatability	±0.5%
Emissivity	0.10 to 1.00
Responce Time	250ms
LCD size (WxH)	29x32mm
Dimensions (WxHxD)	53x169x138mm
Weight	270g

- 4 Digit LCD with backlight
- °C/°F measurements
- 20:1 distance to spot ratio
- Max/Min/Dif/Avg temperature display with hold function
- Sleep mode and low battery warning
- USB or 9V battery power
- Tripod mount
- Supplied with 9V battery, carry bag, USB lead and user manual

510029.509474

Description	Order Code	Price Each 1+
Infrared Thermometer	**156-3716**	

Dual Laser Infrared Thermometers

- Dual laser pointers converge to a single spot when the unit is at the optimal distance from the object being measured
- Measures °C and °F
- Distance to spot size ratio is 8:1 at the focal point
- Impact-resistant double moulded ABS case
- Response time less than 150 milliseconds
- Large backlit LCD display with function indicators
- Automatic data hold when trigger released
- Auto power off
- Over range indication
- Supplied with carry case and battery

Model	IR-8861	IR-8862
Measuring Range	-50°C to +450°C	-50°C to +650°C
Resolution	0.1°C	0.1°C
Accuracy	± 1%	± 1%
Emissivity	0.95, fixed	0.1 to 1.0, variable
Battery	PP3	
Dimensions (WxHxD)	43 x 146 x 104mm	
Weight	163g	

480461.466695

Model	Order Code	Price Each 1+
IR-8861	**142-6145**	
IR-8862	**142-6146**	

Infrared Thermometer

AMPROBE

IR608A

The IR 608A non-contact thermometer is the ideal tool for customers who want to measure temperature in a variety of applications. The unit has the following additional features:

- "Pistol grip design" for comfortable grip
- Measuring range -18°C to 275°C
- Laser sighting for accurate targeting
- Display hold (7 seconds)
- Distance to spot size ratio 8:1
- Accuracy to 2%
- Backlit display
- One year "no hassle" warranty

W=60 H=230 D=165mm. Weight 500g

489625.502382

Description	Order Code	Price Each 1+
Infrared Thermometer	**146-6481**	

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration ChargeNATA Calibration Charge	N C4	

Infrared Thermometer

testo

830-T1/-T2

H=190, W=75, D=38mm Weight=200g

830-T1 features

- Fast logging
- Laser sighting
- Adjustable alarm limits
- Audible and visual alarm if limits are exceeded
- Easy handling via pistol design
- Backlit display
- Adjustable emissivity factor (0.2 to 1.0)

830-T2 Extra features

- Exact 2-point siting
- Accurate 12:1 lens
- External temperature probes can be connected
- Emissivity level can be determined

An infrared thermometer with choice of 1 or 2-point laser sighting. Has adjustable limit values and alarm function, the 830-T2 also has connection for external probes.

Measuring Range	-30°C to +400°C
Resolution	0.5°C
Accuracy	±1.5°C (0.1 to +400°C) ±2°C (-30 to 0°C)
Application temp	-20°C to +50°C
Storage temp	-40°C to +70°C
Battery	PP3
Life	15 hours
Lens	830-T1: 10:1 830-T2: 12:1
Contact temp measurement (type K)	-50 to +500°C
Resolution	0.1°C
Accuracy	±0.5°C

377676

Mftrs. List No.	Order Code	Price Each 1+
830-T1	**836-8996**	
830-T2	**836-9003**	

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RoHS Compliant Non-compliant

Infrared Thermometer

Model 62

- Laser guided sighting system for easy targeting with 1% accuracy
- Display in °C or °F
- Backlit display for easy reading in the dark
- MAX temp reading

Form factor	Pistol grip
Temperature range	-30°C to +500°C
Optical resolution	10:1
Response time	≤0.5 seconds
Resolution	0.2°C
Repeatability	2%
Accuracy	
<10°C:	± 1.5°C
10 to 30°C:	±1°C ±1.5% of reading
30 to 500°C:	± 1.5°C
Distance to target	1.5m
Emissivity	Fixed at 0.95

W=101 H=152 D=38mm. Weight 200g

624421

Description	Mftrs List No.	Order Code	Price Each 1+
IR Thermometer	62	**947-9813**	
Holster	H6	**828-3931**	
C101 Hard Case	C101	**947-9783**	

Infrared Thermometers

Fluke 62 Max

NEW

- Dust and water-resistant
- 3 meter drop tested
- Display in °C or °F
- Ergonomically designed
- Will clip to your tool belt or belt loop or easily fits into your tool box
- Precise laser technology makes for more accurate and repeatable measurements
- Fluke 62 Max+ has dual rotating lasers to help you identify an area to be measured
- Large and backlit display
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi and Lo alarms for rapid display of measurements outside the limits

	62 Max	62 Max+
Temperature range	-30°C to 500°C	30°C to 650°C
Accuracy	±1.5°C or ±1.5% of reading	±1.0°C or ±1.0% of reading
Response time (95%)	<500ms	<300ms
Optical resolution	10:1	12:1
Display resolution	0.1°C	
Power	AA battery	
Battery life	10 hours	8 hours
Dimensions	175x85x75mm	
Weight	255g	
Operating temperature	0°C to 50°C	
IP rating	IP54	

659726

Mftrs. List No.	Type	Order Code	Price Each 1+
FLUKE-62 MAX	Single Laser	**211-8264**	
FLUKE-62 MAX +	Dual Laser	**211-8265**	

Infrared Thermometers

60 Series

The Fluke 60 Series non-contact thermometers are the ideal professional diagnostic tools for quick and accurate temperature measurements. Ideal for measuring surface temperatures of rotating, hard-to-reach, electricity live or dangerously hot targets like electrical motors and - panels, and heating and ventilation systems. Laser sighting system guides measurements to the right target and in less than a second, the large temperature display provides a readout of the surface temperature.

W=160 H=200 D=55mm. Weight 320g

- Laser guided sighting system for easy targeting with 1% accuracy
- Up to 12 points datalogging with min, max and average functions
- Up to 50:1 optical resolution
- Choice between models with fixed or adjustable emissivity
- Backlit display for easy reading in the dark
- Temperatures up to 760°C

	63	66	68
Form factor	Pistol grip	Pistol grip	Pistol grip
Temperature range	-32 to 535°C	-32 to 600°C	-32 to 760°C
Optical resolution	12:1	30:1	50:1
Laser beam	●	●	●
Backlit LCD display	●	●	●
Selectable °C or °F	●	●	●
MIN/MAX/AVG/DIF	MAX only	●	●
Datalogging		●	●
Hi/Lo Alarm		●	●
Adjustable emissivity		●	●
	63	**66**	**68**
Response time	≤0.5 secs	≤0.5 secs	≤0.5 secs
Resolution	0.2°C	0.1°C	0.1°C
Repeatability		±0.5% or ≤ ±1°C	
Accuracy			
< 26°C:		±3°C	
-26 to -18°C:		±2.5°C	
-18 to 23°C:		±2°C	
23 to 510°C:		±1% of reading or ±1°C	
> 510°C:	±1.5% of reading	±1% of reading or ±1°C	
Distance to target	Up to 2m	5m	8m
Emissivity	Fixed at 0.95	0.1 to 1.0 by 0.01 steps	

624194

Description	Mftrs. List No.	Order	Price Each 1+	+
63 IR Thermometer 535°C	63	**921-0083**		
Holster	H6	**828-3931**		
Hard Case	C101	**947-9783**		

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

Infrared & Contact Thermometer

561 HVACPro

- IR thermometer for quick measurements up close or at a distance, without a ladder
- Compatible with all standard mini-connector K-type thermocouples
- Velcro pipe probe for superheat, sub-cooling or other contact and ambient measurements
- Single-point laser sighting
- Temperature range optimized for HVAC/R applications
- Easy emissivity adjustment for measuring pipes and ducts more accurately
- Lightweight, portable and very easy to use
- Efficient - no need to shut down equipment when making IR measurements
- MIN, MAX and DIF temperature readings help you quickly identify problems
- Scan large areas or small objects quickly and efficiently
- HVAC/R measurement guide included to maximize your productivity

W=52 H=177 D=164mm. Weight 340g

- Backlit LCD display with dual temperature measurements
- MAX, MINand DIF functions
- 7 second Data Hold
- Two year warranty

Supplied with: K-type velcro pipe probe, hard carry case, 2x AA batteries, user manual and measurement guide.

Temperature range	-40°C to +550°C
Optical resolution	12:1
Emissivity	Three settings: 0.3 / 0.7 / 0.95
Response time	≤500 ms
Accuracy	
0°C to 550°C	±1% of reading or ± 1°C whichever is greater
<0°C	±(1% of reading + 1°C)
Resolution	0.1°C
Repeatability	0.5%
Velcro Pipe Probe (Range 0 -100°C)	±2.2°C
Physical	
Power	2 x AA batteries, giving 12 hours operation

440686.502109

Description	Mftrs List No.	Order Code	Price Each 1+	+
Thermometer	561	**121-8793**		
Holster	H6	**828-3931**		

		Price Each
Standard Calibration Charge	S C4	
UKAS Calibration Charge	N C4	

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Thermometers - Non Contact (IR) - continued

Infrared & Contact Thermometers

FLUKE

566 and 568

- Measure -40°C to 800°C /-40°F to 1472°F (568) or -40°C to 650°C / -40°F to 1202°F (566)
- Easily access advanced features with the soft-key buttons and graphical display
- Measure smaller objects from further away, with a distance-to-spot ratio of 50:1 (568) or 30:1 (566)
- Compatibility with all standard miniconnector K-type thermocouples allows you to preserve your thermocouple investments
- Confidently measure a wide variety of surfaces with the adjustable emissivity feature, including a built-in material table
- Capture up to 99 points (568) or 20 point (566) of data, for downloading and recalling later
- Easily trend and analyze data with included FlukeView Forms software (568) Two-in-one infrared and contact thermometers with an innovative dot matrix display.
- See your data right away without leaving the site, using the USB (568) and your laptop for "Hands-free" datalogging
- Confidently troubleshoot equipment with 1% measurement accuracy
- Versatile interface with six languages from which to choose
- 98 x 96 pixel dot matrix display with two level backlight
- Hi / Low Alarms
- Min / Max / Avg / Diff
- Trigger Lock

Includes: Infrared thermometer with contact thermometer capabilities, FlukeView Forms software (568 only), USB cable (568 only), K-type thermocouple bead probe, hard carrying case, quick start guide, and users manual.

	566	568
Optical resolution	30:1	50:1
Emissivity	Adjustable from 0.1 to 1.00	
Response time	≤500 ms	
Infrared Measurement Specs		
Temperature range	-40°C to +650°C	-40°C to +800°C
0°C to 550°C	±1% of reading or ± 1°C whichever is greater	
<0°C	±(1% of reading + 1°C)	
K-Type Thermocouple Measurement Specs		
Temperature range	-270°C to 1372°C	
-40°C to 1372°C	±1% or 1°C whichever is greater	
-270°C to -40°C	±(1°C + 0.2°	
K-Type Bead Thermocouple Measurement Specs		
Temperature range	-40°C to 260°C	
-40°C to 260°C	±1.1°C	
Physical		
Data Storage	20 points	99 points
Power	2 x AA batteries, giving 12 hours operation	

492395.503400

Description	Mftrs List No.	Order Code	Price Each 1+
Thermometer	566	**150-3751**	
Thermometer	568	**150-3752**	
			Price Each
Standard Calibration Charge		S C4	
UKAS Calibration Charge		N C4	

Infrared Thermometers

FLUKE

570 Series

	574
Temperature range	-30 to 900°C
Optical resolution	Standard 60:1 / Close Focus 50:1
Three dot laser beam for accurate targeting	●
Adjustable emissivity	●
Bar graph display	●
Backlit LCD display	●
Selectable °C or °F	●
Audible and visible Hi/Lo alarm	● / ●
MIN / MAX readings	●
AVG / DIF readings	●
Datalogging (number of measurements)	100
PC interface	RS232
Built-in digital camera	

- Enhanced optics allows measurements of smaller objects from farther away
- True Dimension™ three-dot laser sighting system highlights the true diameter of measurement spots at all distances
- Adjustable emissivity setting and 30 pre-set common material values for more accurate measurements
- 100 data point memory for storage of measurements
- Temperatures up to 900°C
- 2 Years Warranty

Included Accessories
Fluke 574: Hard carry case, batteries, thermocouple K probe, 220V PSU, DataTemp software, RS232 cable

	574
Response time	250 ms (95% of reading)
Resolution	0.1°C of reading up to 900°C
Repeatability	±0.5% of reading or ±1°C
Accuracy	±0.75% of reading, ±0.75°C *
Typical distance to target	10.5m
Emissivity	Digitally adjustable from 0.1 to 1.0 in 0.01 increments

* whichever is greater

624205

Mftrs. List No.	Order Code	Price Each 1+
With Close Focus		
574CF	**947-9856**	
		Price Each
Standard Calibration Charge	S C4	

Thermal Imagers

Thermal Imaging Camera, Ti9

FLUKE

The Fluke Ti9 Electrical - Thermal Imager provides a full picture of many problems in installing, repairing and verifying electrical and mechanical equipment.

Included Accessories:
- SmartView™ analysis and reporting software
- 2 GB SD Memory Card
- SD Card Reader for downloading images into your computer
- Rugged hard carry case and portable soft carry case
- Hand strap
- Rechargeable internal battery
- AC charger/power supply
- Printed Users Manual

Features and Benefits:
- Rugged and Reliable: Engineered to withstand a 2 metre (6.6 feet) drop
- Excellent thermal sensitivity for seeing even small temperature differences (which could indicate problems)
- 640 x 480 large 3.6" diagonal color LCD display (landscape format)
- Temperature measurement ranges for most Industrial and Commercial applications
- SmartView™ analysis and reporting software (with free upgrades through life of product)
- Removable 2 GB SD Memory Card for easy storage and transfer of thermal and visible images
- Complete solution includes hardware and software to get you going
- Two-year warranty
-

Imaging performance	
Thermal: Field of View (FOV)	23° horizontal x 17° vertical
Minimum focus distance	Thermal lens: 15 cm
Thermal sensitivity (NETD)	<0.2 °C at 30 °C (200 mK)
Minimum span (Auto/Manual)	10 °C/5 °C
Focus	Manual
Detector size	160 x 120
Visual (Visible light) camera	640 x 480 pixels, full color
Temperature measurement	
Temperature range	-20°C to +250 °C (-4 °F to +482 °F)
Accuracy	± 5 ° C or 5 % (whichever is greater)
Measurement modes	Center point
Image presentation	
Digital display	9.1 cm (3.6 in) diagonal landscape color VGA (640 x 480) LCD
LCD backlight	Selectable bright or auto
Palettes	Ironbow, blue-red, high contrast, grey
Power	
Battery type	Internal rechargeable battery (included)
Battery operating time	3 to 4 hours continuous operation
Environmental and mechanical design	
Operating temperature	-10 °C t o +50 °C (+14 °F to +122 °F)
Storage temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Relative humidity	Operating and storage 10 % to 90 %, non-condensing
Water and dust resistant	IP54
Two meter (6.6 feet) drop test	Yes
Protective lens cover	Yes
Weight (including battery)	1.2 kg (2.6 lbs)
Imager size (HxWxD)	267 mm x 127 mm x 152 mm (10.5 in x 5.0 in x 6.0 in)

533540

Mftrs. List No.	Order Code	Price Each 1+
FLUKE TI9	**170-0079**	

TROUBLESHOOTING TIPS
Chat online to one of our technical engineers at **farnell.com**

Thermal Imager

FLUKE

Ti100 Series

NEW

A Fluke thermal imager can save you time and money by finding potential problems before they become costly failures. With the innovative features and functionality in the Fluke Ti125, Ti110 and Ti100 imagers, you can perform infrared inspections faster and more efficiently and thoroughly document problem areas for additional follow-up.

- Exclusive IR-OptiFlex™ focus system-ensures that images are in good focus from 1.2 metres (4 feet) and beyond for optimum image clarity and scanning convenience. For shorter distances change to manual mode with the touch of a finger (Ti110 and Ti125).
- Always have references handy-IR-PhotoNotes™ annotation system-Quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas (Ti110 and Ti125).
- Find problems faster and easier-IR-Fusion® with AutoBlend™ mode (Ti125 only)-Accurately identify potential issues by combining digital and IR images with AutoBlend. It blends digital and partially transparent IR images into a single informationfilled image.
- Multi-mode video recording-focus-free video in visible light and infrared with full IR-Fusion. (Ti110 and Ti125 only).
- Easily communicate the location of problems with the Electronic Compass (8-Point Cardinal).

Kit contents: Thermal imagers, AC power adapter, lithium ion smart battery (Ti125 includes 2), USB cable, 2GB SD memory card, hard carrying case, soft transport bag, adjustable hand strap, printed users manual, manuals on CD, SmartView® software and warranty registration card. (Ti125 model also include a two-bay charging base and a multi-format USB memory card reader).

	Ti25	Ti110	Ti100
Thermal imaging performance			
IR resolution (FPA size)	160 x 120 FPA Uncooled Microbolometer		
Spectral band	7.5µm to 14µm (long wave)		
Capture or refresh rate	9Hz or 30Hz versions		9Hz
Detector type			
Field of view (FOV)	22.5°H x 31°V		
Spatial resolution (IFOV)	3.39mRad		
Min focus distance	152.5mm		1.2m
Thermal sensitivity (NETD)	≥ 0.10°C at 30°C target temp (100 mK)		
Minimum span (auto)	5°C		
Minimum span (manual)	2.5°C		
Visual imaging performance			
Color Alarm	High temp., low temp., isotherm	High temp.	–
Temperature measurement			
Temperature range	-20°C to 350°C	-20°C to 250°C	
Accuracy	± 2°C or 2% (at 25°C nominal, whichever is greater)		
Focus mechanism	IR-OptiFlex™ focus system		Focus-free 1.2 m
Image presentation			
LCD display	3.5 inch diagonal (portrait format)		
Visible camera	2 megapixel		–
Power			
Battery	Two	One	
Battery operating time	4+ Hours (each)		
General			
Weight	726g		
Dimensions (HxWxD)	284 x 86 x 135mm		

653681

Mftrs.		Price Each
List No.	**Order Code**	1+
FLK-TI100 9HZ	**209-4466**	
FLK-TI110 9HZ	**209-4467**	
FLK-TI125 9HZ	**209-4468**	
Accessories		
Sun Visor	**209-4469**	
Tripod Mounting	**209-4470**	
Rechargeable Battery	**209-4471**	
		Price Each
Standard Calibration Charge	S C 18	

Thermal Imaging Camera, TiRx

FLUKE

NEW

The new Fluke TiRx Inspector Thermal Imager offers a superior image quality, unmatched ruggedness and unique ease-of-use at a breakthrough price point for the building inspector, HVAC technician, or energy assessor/auditor.

Included Accessories:

- SmartView™ analysis and reporting software
- 2 GB SD Memory Card (for storing well over 1200 images at a time)
- SD Card Reader for easily downloading images into your computer
- Rugged hard carry case and portable soft carry case
- Hand strap for use with the right or left hand.
- Rechargeable internal battery
- AC charger/power supply
- Printed Users Manual (individually printed in 16 different languages)
- Interactive Training DVD to help get you started

Features and Benefits:

- Rugged and Reliable: Engineered to withstand a 2 metre (6.6 feet) drop for maximum ruggedness
- Excellent thermal sensitivity for seeing even small temperature differences (which could indicate problems)
- 640 x 480 large 3.6" diagonal color LCD display (landscape format)
- Temperature measurement ranges optimized for Building Inspection and Diagnostics applications
- SmartView™ analysis and reporting software (with free upgrades through life of product)
- Removable 2 GB SD Memory Card for easy storage and transfer of thermal images
- Complete solution includes hardware and software to get you going
- Two-year warranty for peace-of-mind and dependability
- Upgradeable to a TiR with IR-Fusion® capabilities
-

Imaging performance	
Thermal: Field of View (FOV)	23° horizontal x 17° vertical
Minimum focus distance	Thermal lens: 15 cm
Thermal sensitivity (NETD)	<0.1 °C at 30 °C (100 mK)
Minimum span (Auto/Manual)	5 °C / 2.5 °C
Focus	Manual, on-handed focus capability
Detector size	160 x 120
Visual (Visible light) camera	640 x 480 pixels, full color
Temperature measurement	
Temperature range	-20°C to +100 °C (-4 °F to +212 °F)
Accuracy	± 5 ° C or 5 % (whichever is greater)
Measurement modes	Center point
Image presentation	
Digital display	9.1 cm (3.6 in) diagonal landscape color VGA (640 x 480) LCD
LCD backlight	Selectable bright or auto
Palettes	Ironbow, blue-red, high contrast, grey scale
Power	
Battery type	Internal rechargeable battery (included)
Battery operating time	3 to 4 hours continuous operation
Environmental and mechanical design	
Operating temperature	-10 °C t o +50 °C (+14 °F to +122 °F)
Storage temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Relative humidity	Operating and storage 10 % to 90 %, non-condensing
Water and dust resistant	IP54
Two meter (6.6 feet) drop test	Yes
Protective lens cover	Yes
Weight (including battery)	1.2 kg (2.6 lbs)
Imager size (HxWxD)	267 mm x 127 mm x 152 mm (10.5 in x 5.0 in x 6.0 in)

533548

Mftrs.		Price Each
List No.	**Order Code**	1+
FLUKE TIRX	**170-0081**	

Fluke TiR Series Thermal Imagers

FLUKE

FLUKE-TIR

FLUKE-TIR1

Fluke TiR Series Thermal Imagers are built specifically for the building diagnostic industry. Property managers and facility managers use thermal imaging to protect investments and keep buildings in a well maintained, healthy state.

Typical thermal imaging building applications:

Thermal imaging is an efficient, non-destructive testing method to detect (potential) problem areas such as:

- Moisture intrusion in roof systems, walls, flooring, ceilings and other building areas
- Leaks in water pipes, buried steam lines, water lines or underground heating systems and sprinkler systems
- Missing or inadequate insulation areas
- Heat or cooling loss, HVAC/R problem areas
- Connection problems in low voltage electrical systems
- Termite and pest issues
- Construction failure areas

Product Specifications:

	Fluke TiR1	Fluke TiR
Minimum Focus distance	15cm	
Thermal sensitivity (NETD)	≤ 0.07 °C at 30 °C (70 mK)	≤ 0.1 °C at 30 °C (100 mK)
Accuracy	± 2 °C or 2 % (whichever is greater)	± 5 °C or 5 % (whichever is greater)
Voice memo recorder (voice annotation)	Yes	No
Operating temperature	-10 °C to +50 °C	
Storage temperature	-20 °C to +50 °C	
Relative humidity	Operating and storage 10 % to 90 %, non-condensing	
Water and dust resistant	IP54	
Two meter (6.5 feet) drop test	Yes	
Protective lens cover	Yes	
Weight (including battery)	1.2 kg	
Imager size (HxWxD)	267 mm x 127 mm x 152 mm	

Thermal Imagers - continued

Fluke TiR Series Thermal Imagers - continued

549352

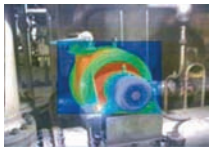
Mftrs. List No.	Order Code	Price Each 1+
FLUKE-TIR	177-2097	
FLUKE-TIR1	177-2098	

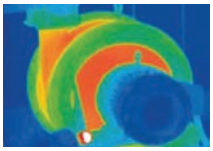
Thermal Imager

FLUKE

Ti10 & Ti25

The Ultimate Tools for Troubleshooting and Maintenance!





The Fluke Ti25 and Ti10 are the perfect tools to add to your problem solving arsenal. Built for tough work environments, these high-performance, fully radiometric images are ideal for troubleshooting electrical installations, electro-mechanical equipment, process instrumentation, HVAC equipment and others.
New IR-Fusion™ Technology, combines both visual and infrared images at the same time, making the images easier to understand.

- Engineered and tested to withstand a 2 metre drop, when was the last time you dropped a tool?
- Withstands dust and water-tested to an IP54 rating
- Innovative protective lens cover protects the lens when not in use. The cover is securely attached and out of the way while images are being taken.
- Works in ambient temperatures as low as -10 °C and high as +50 °C
- Delivers the clear, crisp images needed to find problems fast
- Identify even small temperature differences that could indicate problems with excellent thermal sensitivity (NETD)
- High performance, low noise sensor provides high quality image and stable temperature reading
- Even the smallest details become visible with the large, widescreen full VGA color LCD display
- Intuitive, three-button menu is easy to use... simply navigate with the push of a thumb.
- No need to carry pen and paper, record findings by speaking into the camera. Voice annotations can be recorded with every image you take. Voice comments are saved along with individual images for future reference (Ti25 only)
- Store more than 3,000 screen images
- (.bmp format) for easy reporting direct into Microsoft Word™ and other programs or 1,200 IR-Fusion images, including thermal image, visual image, temperature data and voice recorded comments for reporting and analysis purpose. Data is stored on included 2 GB SD memory card.

Fluke SmartView™ software is included with each Fluke thermal imager.

- Powerful, modular suite of software tools for viewing, annotating, editing and analyzing of infrared images.
- Generate customizable, professional-looking reports in a few easy steps.
- Full support of IR-Fusion Technology lets you edit images in five viewing modes.

Compatability:
Windows® 2000 SP4 with update rollup 1/XP SP2/Vista

	Ti25	Ti10
Infra Red Performance		
Thermal sensitivity @ 30°C	≤ 0.1°C (100mK)	≤ 0.2°C (200mK)
Minimum span (Auto/Manual)	5 °C / 2.5 °C	10 °C / 5 °C
Picture in Picture Modes	Blending-Min, Mid, & Max	Standard
Measurement range	-20 °C to 350 °C, 2 ranges	-20 °C to 250 °C
Accuracy	± 2 °C or 2% (whichever is greater)	± 5°C or 5% (whichever is greater)
Markers	Centre, Hot & Cold	Centre
Voice memo recorder	✓	—
Protection	IP54	IP54
Field of view	23° Horizontal x 17° Vertical	
Spatial resolution	2.5 mrad	
Minimum focus distance	15cm	

501657

Mftrs. List No.	Order Code	Price Each 1+
TI25	155-3576	
TI10	155-3577	
Accessories		
TI-CAR CHARGER	155-3578	
Standard Calibration Charge	S C8	
UKAS Calibration Charge	N C8	

IMPROVED BACK ORDER DELIVERY

Receive email updates with the exact status, due date and despatch information of all your back order items **farnell.com**

Industrial Thermal Imagers

FLUKE

Ti27 & Ti29

NEW

The greatest technological advancement in thermography may be how Fluke has made it so simple to capture images and analyze data right out of the box. With just a push of your thumb, go from one handed manual smart focus to adding picture-in-picture and even add comments in your own voice. The Fluke Ti27 and Ti29 offers the only on-camera blended infrared with patented Fluke IR-Fusion® technology precisely aligning visible and IR images to better diagnose issues.

- Delivers the clear, crisp images needed to find problems fast
- Identify even the smallest temperature differences that could indicate problems with industry-leading thermal sensitivity (NETD).
- Automatic alignment (parallax correction) of visual and infrared images with Fluke patented IR-Fusion®
- Optional telephoto and wide angle lenses available for added versatility and special applications. (easily installable in the field)
- Field replaceable batteries give you maximum flexibility no matter where your work takes you
- Intuitive, three-button menu is easy to use - simply navigate with the push of a thumb
- No need to carry pen and paper - record findings by speaking into the imager. Voice annotations can be recorded with every image you take. Voice comments are saved along with individual images for future reference
- One-handed focus capability, emissivity correction, reflected background temperature compensation, and transmission correction increase the accuracy of measurements in most situations
- Adjustable hand strap for left-or right-handed use
- Optimized for field use in challenging work environments
- Engineered and tested to withstand a 2 m drop
- Withstands dust and water - tested to an IP54 rating

	Ti29	Ti27
Temperature		
Temperature measurement range (not calibrated below -10°C)	-20°C to +600°C (-4°F to +1112°F)	
Temperature measurement accuracy	±2°C or 2% (at 25°C nominal, whichever is greater)	
On-screen emissivity correction	Yes	
On-screen reflected background temperature compensation	Yes	
On-screen transmission correction	Yes	
Imaging performance		
Image capture frequency	9 Hz refresh rate	
Resolution	280 x 210 pixels	240 x 180 pixels
Total pixels	58800	43200
Standard infrared lens type		
Field of view	23° x 17°	
Spatial resolution (IFOV)	1.43 mRad	1.67 mRad
Minimum focus distance	150mm	
Optional telephoto infrared lens type		
Field of view	11.5° x 8.7°	
Spatial resolution (IFOV)	0.72 mRad	0.84 mRad
Minimum focus distance	450mm	
Optional wide-angle infrared lens type		
Field of view	46° x 34°	
Spatial resolution (IFOV)	2.86 mRad	3.34 mRad
Minimum focus distance	75mm	
Focus mechanism	Manual, one-handed Smart Focus capability	
General specifications		
Display	91mm diagonal landscape color VGA (640 x 480) LCD with backlight and clear protective cover	
Software	SmartView® full analysis and reporting software included	
Safety standards	CSA (US and CAN): C22.2 No. 61010-1-04, UL: UL STD 61010-1 (2nd Edition), ISA: 82.02.01	
Size (H x W x L)	277 x 122 x 170mm	
Weight (battery included)	1.05kg	
Supported Languages	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish	

Kit Contents: Thermal imager with standard infrared lens, AC power supply and universal battery pack charger, 2 lithium ion battery packs, SD memory card, multi-format USB memory card reader, SmartView® software, hard carrying case, soft transport bag, adjustable hand strap, printed users manual and warranty registration card.

635760

Description	Order Code	Price Each 1+
Ti29 Thermal Imager	190-3547	
Ti27 Thermal Imager	190-3549	
Accessories		
Telephoto Infrared Lens	190-3551	
Wide-angle Infrared Lens	190-3552	

Industrial Thermal Imager

Ti32

NEW

Designed for industrial and commercial environments, the Fluke P3 Series of thermal imagers deliver superior image quality, versatility, and affordability without compromise. They also boast superior infrared resolution, industry leading spatial resolution, and a high defi nition display creating the sharpest images in their price classes. Finding a potential problem before it becomes a costly disaster shows you just how much a Fluke thermal imager can save you in time, money and even lifes.

- Delivers the clear, crisp images needed to find problems fast with up to 320 x 240 sensor
- Identify even the smallest temperature differences that could indicate problems with industry-leading thermal sensitivity (NETD), down to 45 mK
- Automatic alignment (parallax correction) of visual and infrared images with Fluke patented IR-Fusion®
- Field replaceable batteries give you maximum fl exibility no matter where your work takes you.
- Intuitive, three-button menu is easy to use - simply navigate with the push of a thumb
- No need to carry pen and paper, record findings by speaking into the imager
- Voice annotations can be recorded with every image you take. Voice comments are saved along with individual images for future reference.
- One-handed focus capability, emissivity correction, reflected background temperature compensation, and transmission correction increase the accuracy of
- measurements in most situations.
- Adjustable hand strap for left-or right-handed use
- Optimized for field use in challenging work environments
- Engineered and tested to withstand a 2 m drop for the ultimate peace of mind
- Withstands dust and water, tested to an IP54 rating
- With their rugged design, integrated lens cover, protected display and 2 meter drop test, they are designed to handle the harshest environments.

Kit contents: Thermal imager, smartView® software, 2 GB SD card, SD card reader, rugged hard carrying case, soft carrying case, hand strap, rechargeable battery, AC charger/power supply and user manual.

	Ti32
Thermal imaging performance	
Detector type	320 x 240 Focal Plane Array, uncooled microbolometer
Field of view (FOV)	23° horizontal x 17° vertical
Spatial resolution (IFOV)	1.67 mRad
Min focus distance	150mm
Thermal sensitivity (NETD)	≤0.5°C at 30°C (50 mK)
Minimum span (auto/manual)	2.5°C / 5°C
Focus	Manual
Optional telephot infrared lens type	
Field of view (FOV)	292mm x 220mm
Minimum focus distance	450mm
Optional wide-angle infrared lens type	
Field of view (FOV)	1170mm x 86omm
Minimum focus distance	75mm
Visual imaging performance	
Minimum focus distance	460mm
On camera operating modes	Picture-in-Picture and full screen IR plus Blending
Color Alarm	High temperature alarm
Visible light camera	2.0 MegaPixel
Temperature measurement	
Temperature range	-20°C to 600°C
Accuracy	±2°C or 2%
Measurement modes	Center point and hot and cold markers
Image presentation	
Digital display	91mm landscape color VGA (640x480) LCD
LCD backlight	Selectable bright or auto
Power	
Battery type	Two replaceable rechargeable battery packs (Lithium ion)
Battery operating time	4+ hours per battery pack
General	
Weight	1.05 kg
Dimensions (HxWxD)	277 x 122 x 170mm

642373

Mftrs. List No.	Order Code	Price Each 1+
FLUKE TI32	**205-8941**	
Accessories		
Telephoto Infrared Lens	**190-3551**	
Wide-angle Infrared Lens	**190-3552**	

Process Timers

Bench Process Timer

Easy to use as a standard timer or automatically triggered by external devices for start/stop via 4mm jack sockets. A high accuracy timer, with a robust construction ideal for regular use. Colour coded buttons and jack sockets make the timer extremely practical and convenient to use.

- Robust construction - impact-resistant ABS case with non-slip rubber feet for stability on the bench
- 30ppm quartz crystal with a fixed calibrated capacitor of 27pF for high accuracy timing
- 15mm LCD display
- 4mm jack sockets for Start/Stop & Reset allow automatic triggering of timer by external devices
- Pressing the reset button during a timing cycle displays the time elapsed
- Supplied with battery

Capacity	99mins, 59s, 99/100ths with auto roll-over
Resolution	0.01s
Accuracy	± 1 Sec. in 24 hours
Power	1x 1.5V AAA battery
Dimensions (WxHxD)	105x80x100mm
Weight	151g

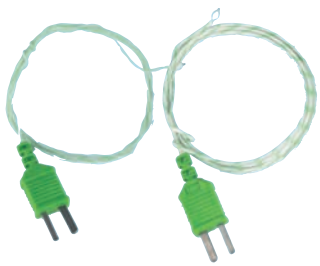
480551.466709

Order Code	Price Each 1+
142-6154	

Temperature Probes & Accessories

Fine Wire Probes

KA Series



K type fine wire thermocouple sensors in a choice of temperature ranges.

- PTFE fine wire sensors for KA01 and Fibre Glass for KA02
- Class 1 material
- Moulded thermocouple miniature connector

339597.409722

Mftrs. List No.	Temperature Range	Order Code	Price Each 1+
KA01	-100 to + 250°C	**492-0971**	
KA02	-100 to + 650°C	**492-0983**	

General Purpose Probes

KM Series

K type surface probes for for general purpose measurement, with a choice of shaft sizes.

- Temperature range: -50 to +1100°C
- The material can be bent without affecting performance
- Excellent for measurement of air, gas, liquid and applications requiring difficult access
- Supplied with 2m curly cable with miniature plug

339595.409681

Mftrs. List No.	Shaft Size (mm)	Order Code	Price Each 1+
KM01	100 x 1.5	**492-0909**	
KM03	100 x 3.0	**492-0880**	
KM04	300 x 3.0	**492-0892**	

Temperature Probes & Accessories - continued

Surface Probes
KS Series

A range of K type surface probes for measuring within different temperature ranges.
- Excellent accuracy
- Fast response
- Fitted with 2m curly cable and miniature plug

339593.409615

Mftrs. List No.	Measuring Range	Order Code	Price Each 1+
KS08	-50 to +950°C	492-0831	
KS07	-50 to +600°C	492-0843	
KS01	-50 to +250°C	492-0855	

Needle Probes
KP Series

K type surface probes for for general purpose (KP05), or heavy duty (KP07) measurement.
- Temperature range: -100 to 600°C
- With pencil point tip for ease of penetration
- Ideal for measurement of semi-solid or solid materials
- Waterproof

339594.409670

Mftrs. List No.	Shaft Diameter	Order Code	Price Each 1+
KP05	3.3mm	492-0867	

Temperature Probes

A range of thermocouple probes designed for use with Fluke test meters for contact temperature measurements. SureGrip™ accessories are designed to improve steadiness in slippery hands. Rubber overmoulded surfaces and finger-hugging curves give the user a comfortable, reliable grip on the accessory so they can focus on making an accurate measurement.

80PK-22 SureGrip™ Immersion Probe
- Type-K thermocouple for use in liquids and gels
- Measurement range: -40°C to 1090°C

80PK-24 SureGrip™ Air Probe
- Type-K thermocouple for use in air and non-caustic gas measurements
- Bead protected by perforated baffle
- Measurement range: -40°C to 816°C

80PK-25SureGrip™ Piercing Probe
- Type-K thermocouple suitable for food industry, liquids and gels
- Measurement range: -40°C to 350°C

80PT-25 SureGrip™ Piercing Probe
- 80PT-25: operates with T-type thermometers
- Measurement range: -196°C to 350°C

80PK-26 SureGrip™ General Purpose Probe
- Type-K thermocouple with tapered tip for use in air, non-caustic gas and surface applications
- Measurement range: -40°C to 816°C

80PK-27 SureGRip™ Industrial Surface Probe
- Type-K thermocouple for surfaces in rugged environment
- Durable ribbon sensor
- Measurement range: 127°C to 600°C

339464

Mftrs. List No.	Order Code	Price Each 1+
80PK-22	491-7169	
80PK-24	491-7170	
80PK-25	491-7182	
80PT-25	491-7194	
80PK-26	491-7200	
80PK-27	491-7212	

Pipe Clamp Probe
KPS10

- K type probe with temperature range: -50 to +150°C
- Ideal for measurement of pipe temperatures, flow and return and radiator balancing
- Supplied with 2m of curly cable plus miniature plug

339598.409740

Mftrs. List No.	Order Code	Price Each 1+
KPS10	492-0995	

Velcro Temperature Probe

Model: 80PK-11
- Designed for hands free measurement
- Use several and leave in place for routine maintenance
- Use with any temperature-measuring instrument designed to accept Type-K thermocouples
- Measurement Range: 30°C to 105°C
- Display Accuracy: ±0.1°C
- Measurement Time: 2 seconds
- Max. Voltage: 24V ac rms or 60V dc
- Cable: 0.5m, with 0.5m Velcro cuff

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Description	Mftrs. List No.	Order Code	Price Each 1+	+
Digital Multimeter	80PK-11	132-7567		

	Price Each
Standard Calibration Charge	S C4
UKAS Calibration Charge **NATA Calibration Charge**	N C4

Environmental Dataloggers

Low-cost USB Temperature Data Logger
EL-USB-LITE

A low-cost data logger that measures and stores temperature readings. The data logger can be configured and the stored data downloaded by plugging the module into a PC's USB port and running the supplied control software. The downloaded data can be graphed, printed and exported to other applications.
- Stores up to 4000 temperature readings
- 30 days continuous use from a single battery
- Supplied software supports Windows 98SE/2000/XP
- Measurement in °C or °F
- Programmable logger name
- Programmable high and low alarm limits
- Red / Green alarm status indication at the push of a button

Measurement Range	-10°C to +50°C	Accuracy (overall error)	±3°C
Internal Resolution	1 °C	Logging Rate	every 30 minutes

415811.428945

Mftrs. List No.	Order Code	Price Each 1+
EL-USB-LITE	100-6157	

Temperature Data Logger with USB Interface

Module: H=20.5, W=20.5, L=94

- USB interface for set-up and data download
- 16,000 readings
- -35 to +80°C measurement range
- 2 User-Programmable alarm thresholds
- Bright red, green and amber LED status indication
- Replaceable internal lithium battery
- Translucent lid provides IP67 waterproof seal
- Supplied with batteries

Measurement Range	Internal Resolution	Accuracy (Overall Error)	Logging Rate	Operating Temperature	Battery Life
-35 to +80°C	0.5°C	±1°C (typ.), ±2°C (Max.)	10 Sec. to 12 Hrs	-25 to +80°C	1 Year (Min.)

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Mftrs. List No.	Order Code	Price Each 1+
EL USB-1	491-3437	

RoHS Compliant Non-compliant

Thermocouple Data Logger with USB Interface

EL-USB-TC

L = 118, Diameter = 27mm

This data logger measures and stores over 32,000 temperature readings from either a K, J or T type thermocouple . A thermocouple is attached via the thermocouple socket at the base of the unit. The user can easily set up the thermocouple type, thermocouple calibration, logging rate, start-time, logging mode, and download the stored data by plugging the module straight into a PC's USB port and running the purpose designed software under Windows 98, 2000 or XP. Data can then be graphed, printed and exported to other applications. The data logger is supplied complete with a long-life lithium battery, which will last for approximately 6 months. The data logger is protected against moisture.

- USB Interface for set-up and data download
- 2 User-Programmable alarm thresholds
- Bright red and green LED Indication
- Replaceable internal lithium battery

Data Logger Set Ups:

- Logger name
- °C, °F

- Logging rate (1s, 10s, 1m, 5m, 30m, 1hr, 6hr, 12hr)
- High and low alarms
- Start date and start Time
- Range of logging modes available
- Calibration facility

Contents: Data logger, software on CD, battery, 1.5m K-type thermocouple

Measurement Range (**K** Type)	-200°C to 1300°C
Measurement Range (**J** Type)	-130°C to 900°C
Measurement Range (**T** Type)	-200°C to 350°C
Resolution (Internal and displayed)	1°C
Logging Rate	Min. (every 1s), Max. (every 12 hrs)
Operating Temperature	-35°C to 80°C
Battery	½AA 3.6V Lithium

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Mftrs. List No.	Order Code	Price Each 1+
EL-USB-TC	**146-9293**	

Real-Time USB Temperature and Humidity Monitor

EL-USB-RT

L = 77, W = 19, D = 11MM

When plugged into the USB port of a PC installed with the purpose designed software under Windows XP and Vista, EL-USB-RT measures temperature and relative humidity. The PC displays the temperature, humidity and dew point in real-time and saves it to a file which can store up to 7 day's worth of data. This data file is overwritten at the beginning of each new logging session. The software provides the option for the user to save the data file permanently to the hard-drive. Temperature, relative humidity and dew point can be graphed, printed and exported to other applications.

- -10 to +60°C (+14 to +140°F) Temperature measurement
- 0 to 100%RH Relative humidity measurement
- Dew point indication via Windows Control Software

- USB Interface
- User-Programmable alarm thresholds for %RH & T

Windows Control Software

Easy to install and use. It provides an environment whereby the user can view the current temperature and humidity or graph in real-time either the current data file or previously saved files. The software can also show the current temperature and humidity in the notification area within the Window's tool-bar. Right-clicking on the EL-USB-RT icon in the notification area enables the user to access the full functionality of the software with just one click.

Contents: Data capture device, software on CD

Relative Humidity		**Temperature**	
Measurement Range	0 to 100 %RH	Measurement Range	-10°C to 60°C
Repeatability	±0.5 %RH	Repeatability	±0.3°C
Accuracy (overall error) (20-80 %RH)	±4.5 %RH	Accuracy (overall error)	±1.5°C
Response Time	5s	Response Time	20s

489306

Mftrs. List No.	Order Code	Price Each 1+
EL-USB-RT	**146-9295**	

USB Relative Humidity and Temperature Data Logger

EL-USB-2

L=103, W=27, D=27mm

EL-USB-2 measures and stores relative humidity and temperature readings. Offers LED status indication, user settable logging rate, start-time and alarms. Downloads are stored via a PCs USB port, software requires Win 98/2000 or XP and also allows humidity, temp and dewpoint data to be graphed and printed.

- 16 000 RH readings
- 16 000 temperature readings
- 4 user-programmable alarms
- Status indicated by flashing red and green LED

Humidity measuring range	0 to 100% RH	Resolution	0.5% RH
Resolution	0.5% RH	Accuracy	±2°C
Accuracy	±3.5% RH	Logging rate	10 sec to 12 hours
Temperature measuring range	-35°C to +80°C		

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Mftrs. List No.	Order Code	Price Each 1+
EL-USB-2	**852-2898**	

Carbon Monoxide (CO) Data Logger with USB Interface

EL-USB-CO

Length = 112mm ∅27mm

Measures and stores up to 32,000 Carbon Monoxide (CO) readings over 0 to 300ppm measurement range. The user can easily set up the logging rate and start time, and download the stored data by plugging the module into a PC's USB port and running the supplied software. The data can then be graphed, printed and exported to other applications. Data is stored in non-volatile memory and is not lost when the battery is flat. A bright red LED will flash and an alarm will sound when a preset alarm limit is exceeded.

- 0 to 300ppm CO Measurement Range
- Stores 32,000 readings
- Supplied software supports Windows 98SE/2000/XP

- USB Interface for Set-up and Data Download
- User-Programmable Alarm Thresholds
- Bright LED and audible alarm indication
- Up to 3 months continuous operation from supplied lithium battery

Measurement Range	0 to 200ppm CO		max: every 12h
Accuracy (overall error)	±15ppm (typical)	Operating Temperature Range	-10 to 40°C
Logging Rate	min: every 10s		

This product is not designed or approved for protecting humans or animal life against harmful concentrations of CO gas. If protection against harmful concentrations of CO gas is required, then the user should employ a product that has been designed and approved for that purpose.

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Mftrs. List No.	Order Code	Price Each 1+
EL-USB-CO	**100-6159**	

USB to InfraRed Converter

USB-LINK-IR

Converts USB data into InfraRed format. This allows a PC to communicate with other devices without the need for a wire link. To operate, simply plug USB-LINK-IR into a free USB port, install the device driver and point the USB-LINK-IR at the device you wish to communicate with. USB-LINK-IR appears as a COM port to PC applications and requires no special software to operate. It requires no batteries and no power adaptor, as it is powered from the host's USB port. The module is designed to work in existing COM port applications and is ideal for modern PCs which often have no RS232 port.

- Converts USB data into InfraRed format
- Transmit distance up to 1.0m
- Support for Windows 98SE/2000/XP, MAC OS-X, Linux 2.40 and above
- Virtual COM port device driver

- Fully compatible with IrDA 1.4 and USB 1.1/2.0 specifications
- IrDA Data rate of 9600 Baud
- Designed to work with existing COM port applications

Baud Rate	9600 bps	Communication Cone	±15°
Max. Communication Distance	1m	Operating Temperature Range	-10 to 50°C

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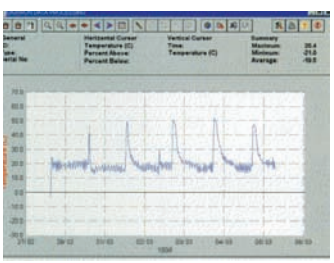
Mftrs. List No.	Order Code	Price Each 1+
USB-LINK-IR	**100-6156**	

ThermaTag Datalogger

TTKIT01 and TT01



The Digitron ThermaTag is a low cost single channel datalogger for temperature ranges -40°C to 40°C or 0°C to 80°C, selectable via a user changeable link. Its compact size makes it ideally suited for organisations requiring multiple loggers for critical temperature monitoring of their products.

Environmental Dataloggers - continued

ThermaTag Datalogger - continued

TTKIT01 and TT01 - continued

In addition to a green LED indicating the units active status the datalogger also features programmable alarm limits. If an alarm condition occurs the integral red LED will flash indicating to the observer that the data logger has experienced temperature conditions outside the pre-set parameters.
Once collected, the stored temperature readings (up to 2000) may be downloaded to a computer through a cable interface (RS-232) using Digilog software, available in a number of languages. Downloaded data may then be stored or transferred in a file format which is compatible with most spread sheet packages.

- Compact size and simple to use
- Selectable temperature range:
- -40°C to +40°C or 0°C to 80°C
- Programmable limit alarms with integral LED indicator
- 2000 Readings
- 12 month battery life
- Free downloadable software - Excel compatible
- Water resistant
- Robust construction

The kit is supplied with software and connection cable

Operating temp.	-40°C to 40°C or 0°C to 80°C	Resolution	<0.1°C
Memory	2000 readings	Battery type	Lithium
Sample rate	60 sec. to 24 hours	Battery life	>1 Year (replaceable)
Alarm LEDs	4 sec red flash when alarm exceeded	Size	42 x 27 x 13mm
Logging	8 sec green flash when active	Weight	20g
Memory full	16 sec green flash when full	Data recovery	Via plug and interface cable to PC
After down load	Sleep	Recorder Start Up	Programmed time/date
Accuracy	±0.5°C		

339432

Description	Mftrs. List No.	Order Code	Price Each 1+
ThermaTag Kit	TTKIT01	**500-4433**	
Additional datalogger	TT01	**500-4445**	

USB Data Logger

DrDAQ®

DrDAQ has built in sensors for light, temperature and sound. It can also measure voltage and resistance. In addition it has a socket for standard pH electrodes and connectors that allow the use of optional external sensors for measuring.

- DrDAQ as a data logger, oscilloscope and signal generator
- Built-in sensors for light, sound and temperature
- Measure pH - just plug in any standard pH electrode
- Sockets for external sensors
- Digital outputs to control external devices
- USB connected and powered
- Use up to 20 USB DrDAQs on a single PC

NEW

No. of input channels	14	DC accuracy	±3%
Max. Sample rate	1 MS/s	Timebases	10 µs/div to 200 s/div
Bandwidth	100 kHz	PC connection	USB 2.0
Resolution	8 bits	Power supply	USB Port
Inputs characteristics	BNC connector, 1 MΩ, DC coupled	PC requirements	Windows XP, Vista, Windows 7
Input ranges	±1.25 V, ±2.5 V, ±5 V, ±10 V		

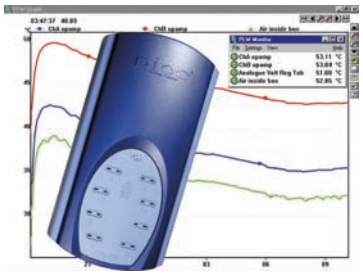
Kit Content: USB DrDAQ, pH Electrode, 2 x 2m Temperature Sensors, Humidity Sensor, Software CD, USB Installation Guide, 3m Sensor Extension Cable, Scope Probe x1/x10 Switchable and USB 2.0 1.8m Cable.

627352

Mftrs. List No.		Order Code	Price Each 1+
USB DRDAQ		**188-7216**	
USB DRDAQ KIT		**188-7217**	
Accessories			
PP163.	Humidity Probe	**188-7218**	

Temperature Datalogger

USB TC-08



- Built in cold junction compensation
- Supplied with PicoLog data logging software
- USB interface ensures easy installation
- Measures and records up to 8 thermocouples
- Works with all popukar thermocouple types
- High resolution and accuracy
- Wide temperature range (-270°C to 1800°C)
- Multiple units can be used on the same PC if more than 8 channels are required
- No power supply required
- Supports Windows XP, Vista and 7.

An 8 channel, PC based temperature data logger with USB interface. It can measure temperatures from -270°C to +1800°C and works with all popular types of thermocouple (B, E, J, K, N, R, S, T). There is also a 60mV range that can be used for other types of sensor. Supplied with PicoLog software for handling and analysis of all data.

Number of channels	8
Accuracy	±(0.3%+0.5°C)
Overload Potection	±10V
Conversion time	200ms for cold junction compensation + 200ms per active channel
Input connectors	Miniature thermocouple
Common mode voltage	±5V max
Output connector	USB1.1 connector cable supplied
Dimensions (WxDxH)	85 x 145 x 25mm

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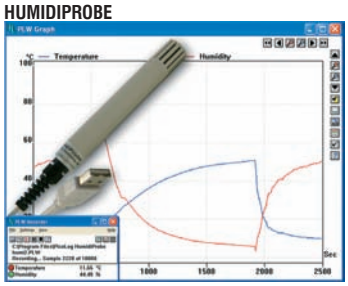
Mftrs. List No.	Order Code	Price Each 1+
TC08 USB	**782-0178**	

Relative Humidity and Temperature Data Logger

HUMIDIPROBE



A straight forward and practical way to monitor relative humidity and temperature readings, and record them directly to your PC or laptop. The compact, all-in-one probe design allows the Humidi-Probe to be used in a wide range of applications from storage and transport, environmental and meteorological, human comfort, server and IT room condition monitoring to production test.
Using the supplied PicoLog data acquisition software, data can be viewed both during and after data collection in spreadsheet or graphical format. Data can also be easily exported to other applications, and software alarms can be configured for both temperature and relative humidity.

- Measures and records temperature and relative humidity
- Compact, all-in-one probe design
- 0 to 100% (non-condensing) relative humidity measuring range
- 0°C to +70°C temperature range
- Fast humidity response
- Connects to a PC or laptop via USB port - no power supply required
- Supplied with PicoLog data acquisition software
- Sample programs in C, Delphi, Excel, LabVIEW, and Visual Basic included

	Range	Accuracy	Resolution	Response Time
Temperature	0°C to +70°C	±0.5°C	0.01°C	5 to 30 seconds
Humidity	0 to 100% RH	±3% RH	0.03% RH	4 seconds
Conversion Time	2 seconds			
Environmental	0 to 70°C (not waterproof)			
PC Connection	USB 1.1 (USB 2.0 compatible)			
Power Supply	From USB (50mA/port)			
Supported Opertaing Systems	Windows XP (SP2), Vista and 7			

417441.428885

Description	Order Code	Price Each 1+	+
HUMIDIPROBE	**107-6341**		

Paperless Humidity and Temperature Recorder

Easy-to-use paperless chart recorder with remote sensor and 49,000 readings memory. Ideal to monitor and record temperature and humidity conditions and history in controlled environments, laboratories, clean rooms, storage and other critical areas.

- Simultaneous numerical and graphical display of Humidity and Temperature readings
- Calculates Dew Point
- Large 120 x 75mm backlit LCD display with adjustable graphical resolution and push-button keypad
- Display indicates time, date, percentage of memory remaining and battery status
- Up to 49,000 data points internal memory and RS-232 interface for data transfer
- User-programmable recording intervals
- Detachable probe extends up to 1 metre for measurements in closed environments (probe can be replaced as separate item and does not require recalibration)
- Audible and visual alarms with high and low limits
- Swivel keypad allows desk or wall mounting for easy viewing
- ExTerm software for Windows allows data transfer to PC, graphical display and export as csv files to MS Excel for data analysis
- Supplied with built-in stand, detachable probe with 1m cable, RS232 cable, ExTerm data download software, AC/DC power adaptor and batteries

Thermometer		Accuracy	±3% RH
Range	-28°C to 60°C	**Physical**	
Accuracy	±1.0°C	Battery	3x AA batteries or AC adaptor
Humidity Meter		Dimensions (WxHxD)	196 x 23 x 127mm
Range	10% to 95% RH	Weight	357 g

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Description	Order Code	Price Each 1+
Paperless Recorder	**142-6149**	

RoHS Compliant Non-compliant

Hygrometer

608

- Standard Testo 608-H1 hygrometer for continuous measurement of humidity, temperature and dew point
- The Testo 608-H2 alarm hygrometer with accuracy of ±2%RH and LED alarm function reliably warns you if limits have been exceeded
- Monitors ambient conditions and dew point in garden centres, storage and clean rooms, museums and laboratories
- Stand alone or attachable
- With td dew point calculation and max/min display
- Humidity sensor not affected by water
- Testo 608-H2 comes with LED alarm to warns if limits are exceeded

	608-H1	608-H2
Storage temperature	-40°C to +70°C	
Battery type	9V block battery	
Battery life	8736h	
Measuring rate	18s	
Weight	168g	
Warranty	1 year	
Measuring range	+10 to +95% RH 0 to +50°C -20 to +50°C	+2 to 98% RH -10 to +70°C -40 to +70°C
Accuracy	±3% RH (+10 to +95% RH) ±1 digit	±2% RH (+2 to +98% RH) ±1 digit
Resolution	0.1% RH (0 to +100% RH)	0.1% RH (0 to +100% RH)
Probe type	NTC	NTC
Accuracy	±0.5°C (at 25°C) ±1 digit	±0.5°C (at 25°C) ±1 digit
Resolution	0.1°C (0 to +50°C)	0.1°C (-10 to +70°C)
Operating temperature	0 to +50°C	-10 to +70°C

234384

Mftrs. List No.	Order Code	Price Each 1+
608-H1	**369-5797**	
608-H2	**369-5803**	

Wireless Weather Station

WMR100

- All in one remote sensor
- Easy set up
- Full function weather station
- Weather forecast
- Indoor / outdoor temperature and humidity
- Outdoor windspeed and direction
- Barometric pressure and rainfall
- Heat index, windchill and dew-point calculations
- Max and Min memory
- PC download facility

486803.473978

Order Code	Price Each 1+
143-0730	